

The Boston Medical and Surgical Journal

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Original Articles.

PROGRESS AND RESULTS IN CANCER CONTROL.

BY FREDERICK L. HOFFMAN, LL.D.,

Consulting Statistician, Prudential Insurance Company of America.

THE Cancer Control Movement has been active for nearly a decade and the time has come for a brief survey of what has been aimed at and what has been achieved. In the nature of the problem, such a review is most difficult on account of the paucity of the statistics required for the purpose.

On first consideration the outlook indeed seems rather discouraging. When the movement started the statement was made that 75,000 persons died annually from malignant diseases in this country. At the present time a conservative estimate places the annual mortality at from 90,000 to 100,000. The anticipated decrease in the death rate, which was looked forward to with confidence a few years ago, has not materialized, but regardless of this aspect of the problem there is a wealth of experience, supporting the viewpoint, that far-reaching, if not precisely measurable results have followed from the efforts that have been made.

It is of the first importance to realize clearly the nature of the problem. The liability to cancer is unquestionably increasing much faster

than the death rate. If it were possible to ascertain the number of cancer cases throughout the country, the number of successful operations, and the number of deaths prevented, the evidence would most conclusively support the conviction that cancer control is being realized to an increasing extent. Unfortunately such data are not as yet available, although much evidence to this effect is in course of being gathered. In other words, if it were not for the persistent effort to arouse the public to the menace of neglected cancer cases, the mortality would be decidedly higher than is actually the case.

The cancer death rate for 1921 is placed at 100 per hundred thousand of population. It is as high as 150 per 100,000 for the city of San Francisco. It also reaches excessive proportions in the city of Portland, Maine. From whatever locality data are collected for a period of years, the evidence is incontrovertible that cancer is actually and relatively, as well as persistently on the increase. Why this is so is of quite secondary importance, for the time being, to the question whether the facts are as stated. Those who are of the opinion that the increase in cancer is more apparent than real, base their conclusions upon guess work, not entitled to serious consideration. The increase in cancer is a world phenomenon and no civilized country today but takes some cognizance of the fact. To oppose the theory of cancer increase is essentially a matter of useless controversy, unworthy of the seriousness of the questions at issue.

Cancer research has made extraordinary prog-

ress and perhaps no disease in its general aspects, is better understood at the present time. By its nature, the cancerous process cannot be dealt with, as a rule, in its inception, but the required treatment must be delayed until the cancerous growth has reached perceptible proportions. Since cancerous growths are without nerves the early onset of the disease is painless. It is only when the cancerous growth has reached larger proportions, and presses upon other organs, that the symptoms become distressing. It is this peculiar situation which accounts for the large measure of public apathy, which in countless cases leads to death. The objective of cancer control is to arouse the public to the supreme importance of the earliest possible diagnosis, the earliest possible treatment, and the complete removal of the cancerous mass, in its earliest stages of development. To the extent that the public can be made to realize the danger of delay in qualified cancer treatment, and the urgency of the complete removal of the cancerous growth, lies the hope of results, which to an increasing extent are being secured, to the enormous advantage of those concerned. While much progress has been made in the surgical treatment of cancer and in the scientific study of tumor developments, an amazing amount of work remains to be done before cancer treatment can be said to rest upon a thoroughly well considered scientific basis.

Cancer is an entity, but it manifests itself in different forms, just as is the case with fevers, and as in the latter, the earlier practice was to consider all forms alike, often with disastrous results, so that the theory that all forms of cancer may be treated alike is likewise one of considerable danger to the patient. It is of the very first importance that every type of cancer should be separately studied and should be made subject to special considerations. What may be the best form of treatment in cancer of the lip or tongue, may not be feasible at all in many cases of cancer of the breast. We as yet know very little as regards the comparative rate of growth of different parts of the human body, and no fallacy is more serious on the part of the general practitioner than to take cancer facts lightly and rest his hopes upon an ultimate operation.

The Society for the Control of Cancer is, therefore, concentrating attention upon the disease in its different forms, while at the same time it is encouraging specialized research regarding certain types of cancer, in co-operation with the College of Surgeons. It is firmly believed that in this direction lies much hope for material and needed improvements in cancer treatment.

I may, to advantage, review very briefly some recent cancer statistics, which I have caused to be brought together for the present purpose. I have combined the returns for 38 cities, which have been made avail-

able to me from 1912 to 1921, inclusive. These cities had at the end of the period, a total population of over twenty-two million, or about one-fifth of the entire population of the continental United States. They may, therefore, be safely relied upon, as representative for the country at large.

During the period 1912-1915 these cities had a cancer death rate of 87.9 per hundred thousand population. During the next five years the rate increased to 95.4 per hundred thousand and during 1921 to 101.5. This rate is the highest which has ever been reached collectively for the large cities of this country. During the first five years of the period there were eight out of the thirty-eight cities with rates in excess of 100 per hundred thousand. During the next five years, there were thirteen such cities, but during 1921 twenty cities had exceeded the rate of 100 per hundred thousand, which, by every standard of normal mortality, must be looked upon as alarming. It is an amazing evidence of effrontery and reckless audacity on the part of those who are unfamiliar with statistical facts and statistical methods of research, to deny, under the circumstances stated, that cancer is actually and relatively, as well as alarmingly on the increase in this country. No one familiar with the facts of medical education and medical progress will maintain that during eleven years such changes in diagnostic methods have been made, as can account for more than a small fraction of this enormous increase in an average rate from 88 to 101 per hundred thousand of population.

The city which has always had an excessively high rate is San Francisco. During 1916-1920 it reported a rate of 122.3. During the five years, 1916-1920, the San Francisco rate increased to 142.2, while during the last year under review, the rate was 151.8, or one of the very highest rates ever reached by any community in this country.

Other cities with extraordinary death rates from cancer are Albany, N. Y.; Boston, Massachusetts; Cincinnati, Ohio; Des Moines, Iowa; Los Angeles, Cal.; Philadelphia, Pa.; Providence, R. I.; Sacramento, Cal.; St. Joseph, Mo., and Springfield, Ill. All of these cities have rates in excess of 120 per hundred thousand of population.

But there are reasons for believing that there are still higher rates to be met with, upon painstaking analysis, in the case of some of the smaller communities. In my treatise on "The Mortality from Cancer Throughout the World," I emphasize the extraordinary cancer death rate prevailing in Madison County, New York. On the present occasion, I would direct attention to the results of the Public Health Survey of LaFayette, Indiana, disclosing a cancer death rate for Tippecanoe County of 123.5, during the ten-year period 1911-1920. In 1917 the cancer death rate of this county reached the

appalling figure of 160.0, compared or contrasted with a figure of 88.7 for the State of Indiana and of 82.0 for the United States registration area.

The foregoing statistical evidence should be sufficient to arouse the apathy of the medical profession and the general public. For, while much is being done, there is by no means, the concentrated, determined effort being made, that is required to "stem the menacing tide" of cancer increase, which reaches into practically every family in the land. The disease is not preventable and never will be preventable, in the accepted sense of the term, but the mortality from the disease can be subject to intelligent and deliberate control, if a proper degree of co-operation is brought about between an aroused medical profession and an aroused public interest.

It affords me pardonable pride to direct attention to what may prove a far-reaching step in this direction. The John Hancock Mutual Life Insurance Company of Boston has just announced that:

"To aid in the scientific warfare against this disease, The John Hancock Mutual Life Insurance Company has arranged with the Cancer Commission of Harvard University to give its policyholders free examination and diagnosis for suspected cases of cancer at the Huntington Memorial Hospital."

It explains that:

"The Hospital is equipped with a new and particularly powerful x-ray apparatus and with other facilities for the study and treatment of cancer, unsurpassed by any other institution of its kind in this country. * * * All members of this company who may have need of this service should apply direct to the secretary of the company by letter or in person. * * * A letter of introduction will be furnished to the physicians at the Huntington Hospital, who will make an examination free of charge and advise as to the best course to pursue. The company's arrangement does not permit of free treatment in case cancer is discovered, as that is not practicable; but we believe that the plan of free examination will prevent much needless suffering and, perhaps, save life."

The company may feel assured that this laudable plan is certainly a step which is in advance of similar action on the part of any other Life Insurance Institution in the world. The advisory medical service rendered to its policyholders is precisely the kind of service most needed in cancer cases and it is to be hoped that the practice will be extended and will be made use of by other insurance companies, as a means whereby countless cases of malignant disease may come early to diagnosis, early to operation, while at the same time dangerous remedies may be avoided.

The medical profession faces a serious problem in dealing with so-called cancer cures. In

this State (Massachusetts), as elsewhere, claims are put forward by men, not trained in the medical arts, men opposed to surgical interference, who present plausible evidence of successful cures, acceptable to fair-minded men, who cannot be accused of prejudice or bias. It is the duty of the medical profession and the duty of the State health authorities to vigorously investigate such claims, and to report on the facts and the findings, be they what they may. While there are no reasons for believing that all such claims are a delusion and a snare, it goes without saying, that in a large majority of cases, the public are frightfully deceived.

The medical profession is familiar with the claims advanced by the so-called Hydropathic Sanatorium of a large city in Pennsylvania, which, in elaborate publications, claims that "Cancer can be exterminated by abandoning the route of circumnavigation," and more preposterous claims, plausibly advanced, with a plea for philanthropic assistance to give nationwide accessibility to an alleged cancer cure. Whatever views may be held with regard to the merits of such proposals, they are entitled to a vigorous investigation, on the part of fair-minded men, not afraid of the consequences in their search after the truth. If such claims are ill-supported by the facts, they are murderous in a large number of cases, in which reliance is placed upon methods which cannot possibly bring about a cure. It certainly is preposterous to allow laymen to advance claims in behalf of cancer cures, without being challenged by members of the medical and surgical profession, and by research institutions, established for the purpose of ascertaining the truth about the cancer problem. It is my firm conviction that a drastic change is called for in the attitude of the medical profession, which, while full well aware of the danger implied, is satisfied with the "do-nothing" attitude, which must react disastrously in countless hopeless and deplorable cancer cases.

I regret that I cannot enlarge upon more interesting scientific aspects, recent discoveries and recent discussions of cancer causation, cancer spread and cancer treatment. The literature on the subject is reaching enormous proportions, but no thoroughly organized effort is being made to assemble in a workable form, all the facts of the cancer problem, which require to be taken into account in arriving at a safe and satisfactory solution.

Personally, I have had no reason to change my viewpoint that cancer is not an inherited disease, that it is not a blood disease, that it is not transmissible from person to person; that on the whole the major cause or conditioning circumstance in cancer, is local irritation or local irritability of some form, long persisted in before the aberrant cell starts on its career of malignant destruction of adjoining tissue and the body itself, from which it derives its life and support.

I cannot do better than draw attention to an admirable discussion of "A Basis for the Prevention of Cancer" (the term is hardly permissible in this connection), advanced by Dr. W. M. L. Coplin of Philadelphia in a contribution to the *Journal of the American Medical Association* of May 20, 1922. Dr. Coplin admirably reviews a vast amount of information, difficult of access, including such questions as "Experimentally Produced Cancer"; "Etiologic Relationship of Infection"; "Cancer as Result of Prolonged Irritation"; cases of Multiple Cancer, and in detail, cancer of the breast, of the vulva, uterus, etc., concluding with the statement that:

"More than forty years ago, Billroth observed that cancer did not develop in the normal mamma; it is doubtful whether it ever arises in the absence of some antecedent lesion; often, as in the skin, such phenomena may be recognized, and it is equally likely that concentrated clinical and pathologic inquiry may lay these processes open to diagnosis in other tissues and organs as well as in the breast. These beginnings of malignant disease, and processes that may precede it constitute possibilities that must be better known and the treatment directed toward potential dangers of cancerous evolution, if the best results are to be attained. Therein lies prevention, which here, as elsewhere, is far more promising than the best results attainable by any method after malignancy has fully developed."

As I have said at the outset, the mortality from cancer is now approximately 100,000 a year, equivalent to a rate of 100 per hundred thousand of population. The disease is increasing from year to year, in practically every State and in practically every community for which the records are available and trustworthy. The increase in cancer is a fact and not a statistical fallacy. The cause of the increase must unquestionably lie in habits of life, which give furtherance to malignant growth, probably fostered by hypernutrition and local irritants of various kinds, which do not likewise affect the life of native races, among whom cancer is extremely rare, if indeed the disease occurs at all. Among our native Indians cancer is very seldom met with among those who are of pure blood; while during my recent investigations in South America I failed to find a single case of cancer of the breast among thousands of native women, as to whom inquiry was made for the purpose.

Progress in cancer control, while fostered by every form of cancer research, lies, however, chiefly in the direction of arousing the public to the menace of delay in cancer treatment. The most wholesome lesson that can be brought home to the public, the most useful truth that can be disseminated, is the simple statement that the earliest indications of any form of abnormality in the body, demand the utmost care and con-

sideration and if necessary a radical form of treatment, whether operative, caustic or radiological, by means of which the cancerous growth is removed or completely destroyed.

Since this was written, I have received the official statistics for all the principal Canadian cities, but they have not as yet been combined into collective aggregate, so that they will have to be dealt with accordingly. Most of the returns are for the year 1921, excepting for Montreal and Quebec. The highest rate on record is recorded for the city of St. John, New Brunswick, given at 152.6. The next highest rate is for London, Ontario, given as 146.8. For Montreal, the rate for 1920 is given as 70.4, and for Quebec as 60.5. It goes without saying, that in Montreal certainly, cancer diagnosis is as near to the point of perfection as anywhere, yet the rate is very materially below the rate for nearly all the other large Canadian cities. For Toronto the rate for 1921 is given, 104.9; for Vancouver, 112.2; for Halifax, 116.5; while even for Edmonton, not so very far from the Arctic Circle, the rate is given as 109.1. Likewise, for the Districts of St. John's, Newfoundland, the rate is returned as having been 95.8, while for Ottawa the rate was 87.6 and for Winnipeg, 87.3.

The Canadian statistics fully confirm the American statistics in indicating a decided increase in cancer liability during the last decade, but throughout most of the rates are high and, as pointed out in some instances, alarmingly so. The Montreal cancer death rate between 1910 and 1920, has increased from 53.0 to 70.4 per hundred thousand, and for the city of Quebec the corresponding increase has been from 51.8 to 60.5, although in some years the rate for Quebec has been as high as 90.2. For Toronto, between 1911 and 1921, the rate has increased from 67.7 to 104.9, although in 1910 the rate was as high as 111.7, and in 1920 as high as 108.6. The rate for Ottawa has increased from 63.4 in 1910 to 87.6 in 1920, although in 1914 the Ottawa rate was 100.1 and in 1917, 116.7.

Of special interest is the rate for London, Ontario, which has increased from 94.7 in 1910 to 146.8 in 1921, reaching one of the very highest on record, corresponding with San Francisco and Portland, Maine.

It is gratifying, therefore, to note an aroused interest in the problem of cancer control in the Canadian Provinces, carried on in co-operation with the American Society for the Control of Cancer.

Hence the problem of cancer increase and cancer control is a world-wide phenomenon, calling upon the medical profession in particular, to exert itself still more strenuously than as heretofore was the case, to bring about the control of a menace, which strikes sooner or later into every home in the land. If the mortality of tuberculosis in twenty years has been reduced fifty per cent., it should not be impossible, by

deliberate means, to reduce the mortality from cancer twenty-five per cent. during the next twenty years, equivalent to an annual reduction in cancer deaths of possibly 25,000 to 30,000. The mortality can be reduced and it must be reduced, but a reduction can only be brought about through the whole-hearted and thoroughly perfected co-operation of the medical profession, the general public and the health authorities of the State.

CANCER AS AN OUT-PATIENT PROBLEM.*

BY HILBERT F. DAY, M.D., F.A.C.S., BOSTON.

The Boston Dispensary.

DURING this week, the whole country and particularly the medical profession, is giving careful thought to cancer and is trying to plan ways of diminishing its mortality.

The Boston Dispensary is one of the largest purely out-patient clinics in the country and it is natural that we who work in and for it should search our minds to decide what our contribution to the campaign is and should be.

Let us consider the problem that confronts such a clinic. During each year, more than fifty thousand patients consult it, all for diagnosis and many for subsequent treatment. Out of this large group many cases of malignant disease are found. All types of cancer are seen save those advanced cases which are no longer ambulatory.

The procedure in cases of suspected malignancy is a custom rather than a rule and is embraced by the idea of prompt coöperation between the various departments, because no one knows when the disease may cease to be a local manifestation. This form of group medicine facilitates and hastens a diagnosis. Cases are generally not sent to another clinic by the ordinary "refer" slip, but because of their importance and interest are personally conducted by the head of one department to the doctor in charge of another, often gathering several chiefs at once for a conference.

Why is this necessary? Two or three illustrative cases will suffice to show the reason for it.

A. A man presents himself at the Surgical Clinic with a chronic ulcer at the corner of the mouth. In this case it is often best to have a consultation with a dermatologist and a dark field examination of the discharge from the ulcer to rule out the spirochetæ of syphilis. (We frown on biopsies, that is, the operative removal of tissue for pathological examination unless it is a case where an adequate operation can immediately be performed.)

B. A child comes with a tender swelling in

the upper arm. Here we wish a blood examination (question of Wassermann); an x-ray examination, a general physical examination to rule out other foci and another opinion from the syphilographer. When these doctors have gotten together, granting that the case showed chronic inflammation of bone, a differential diagnosis has to be established between sarcoma, syphilis, tuberculosis and chronic osteomyelitis.

C. A woman complains of chronic abdominal pain, often right-sided. Here the services of the internist, a gastroenterologist, the X-Ray Department, and the Laboratory Department for examination of blood and feces and the Surgical Department are involved, for it is important to early establish the possible diagnosis of malignant disease of the stomach or intestines.

Another function of the out-patient diagnostician and a very real one, is education in relation to cancer, as we are constantly having to reassure people who think they may have cancer that they have not cancer and to tell them what signs should take them to a physician for examination. We also have to correct wrong ideas which are instilled by others. For instance, I examined today a woman with undoubtedly beginning carcinoma of the breast. She told me that she had been informed outside that there was no reason for her seeing a doctor until she felt lumps in her axilla, despite the fact that she had a lump in her breast and a retracted nipple.

The diagnosis having been established, what class of cases should be treated in the Out-Patient Department? In the Boston Dispensary, only one class of cases are so treated, that is, small epitheliomata of the skin which can be reached with radium or x-ray. This leaves two other classes, those who still can be benefited by surgery and the inoperable patients. A patient falling in the first of these two divisions immediately becomes a social problem. Great are the difficulties often encountered. Not only does the patient himself have to be carefully handled and be made to understand the seriousness of his trouble and the importance of having it taken care of, but often provision for the family during the absence of the patient from home has to be made. Even then, it may mean many visits to the family and many talks with the afflicted individual before he can be persuaded to accept the treatment advised. Every such case is followed until he has accepted the plan we have made for him or has definitely put himself under the care of another doctor or institution.

I have, in the last two weeks, seen a man in the Medical Department with a question of cancer of the duodenum. This patient was too poor to pay for hospital care and lived in a neighboring town. His willingness to submit to operation was obtained by the social worker after the necessity was explained by the doctor. At the request of the Social Service Department, I

*Substance of a talk prepared for visitors at the Boston Dispensary during Cancer Week, November 18-19, 1922.

wrote to the surgeon in charge of the local hospital and at his invitation attended the operation and then was able to report back to the doctor who first saw the patient the operative findings. As you see, this patient was followed through.

Cases of inoperable cancer, especially those who will soon become bed cases, are cared for in one of two ways. They are either placed in hospitals where they can spend the rest of their days or are treated in their homes by our district physicians and the district nurses.

Conclusions. Malignant disease as an outpatient problem is primarily one of medical coöperation or rapid and accurate diagnosis, and, secondarily, a social service problem of first importance.

CANCER AS A PREVENTABLE DISEASE.

BY JOSEPH C. BLOODGOOD, M.D., BALTIMORE.

ALTHOUGH Cancer Week was duly observed and the messages of hope and caution were sent broadcast, the subject warrants repetition of the salient features of the publicity campaign. Dr. Joseph C. Bloodgood has submitted a series of short papers dealing with the phases of the cancer problem as suggested by the Maryland Cancer Committee. It was recommended that one paper should be published each day of the week. The various local committees were urged to emphasize the following facts:

"That the press of the country can do more for the cure of cancer by the frequent publication of this correct information than the entire medical profession can accomplish by the late treatment of cancer.

"Cancer is a disease of ignorance. The cure of ignorance is information. At present the best medium for correct information to reach the largest number of people is the press.

"This country is spending millions on the education of men and women in the science and art of medicine, millions in equipping and maintaining hospitals; yet the public fail to realize that the majority of people consult the medical profession and come into the hospital for examination and treatment in the late, rather than in the early stage of the disease.

"The prevention of this is the education of the public. They should be made to realize that as yet they are not reaping the full benefit of their investment in medical schools and hospitals.

"The education of the public in regard to the earlier diagnosis and treatment of disease is as much a part of preventive medicine as the elimination of the mosquito for the eradication of malaria, proper water supply for the prevention of typhoid fever, vaccination as a safeguard against smallpox, the giving of antitoxin of tetanus in all accidental wounds.

"Therefore the cure of cancer at the present time is not a drug, nor a serum, nor a ray, nor a miracle, but simply the education of the people as to the signs of its beginning in local lesions and the importance of an immediate examination which will lead to recognition and treatment in the most favorable stage for a cure."

This series of papers should be kept in available form for reference when physicians are appealed to for explanation of the facts relating to the existence, cure and prevention of cancer.

A LUMP IN THE BREAST.

When all women understand the message as some women have understood it, the United States Census Bureau will record a great decrease in the number of deaths among women over 25 years of age from cancer of the breast.

Any woman over 25 years of age who feels a lump in the breast today should be examined tomorrow.

When a woman feels a lump in the breast, or thinks she feels a lump, and is examined at once, the chances are that in 50 per cent. the lump is only part of a lumpy breast for which there is no necessity for an operation and which has no relation to cancer.

If the lump the woman feels is found to be a definite lump by her medical adviser, an immediate operation is the best assurance of a permanent cure. When these definite lumps are immediately operated upon, in over 50 per cent. the lumps will be found to be benign (not cancer); the lump will be removed, the breast saved. If the lump proves to be cancer, the breast must be removed, and the chances of a permanent cure are over 70 per cent.

The woman who feels a lump in the breast and delays, runs great risks. The lump which in the beginning may not be cancer, at any moment may change into cancer. The cells in the cancer lump may break away and reach the glands in the armpit, when the chances of a permanent cure after operation are reduced from over 70 to 20 per cent. If the cells have migrated further into the internal organs the chances of a cure are reduced to nothing.

All the women of this country need to know for their protection against death from cancer of the breast is this short message in regard to a lump in the breast.

CANCER OF THE SKIN A PREVENTABLE DISEASE.

Some individuals are born with skin defects. Other individuals acquire them. In a few the skin lesion is forced upon them by injury or infection.

Cancer never begins in a healthy spot. There is always some defect there first which is not cancer. Anyone who can see or feel will know of this little skin lesion, which may have been present since birth, or have been observed but

recently, or which has formed since an injury, or a pimple. These little skin defects are black moles, warts, areas of scaly skin, with or without seabs, little nodules like shot or peas, or definite sores, unhealed ulcers. Cancer does not begin in every one of these little skin defects; but these skin defects are like mushrooms, which look alike to the ignorant—some mushrooms are dangerous to eat, others are good food. If you wish to eat mushrooms without danger of death, they must be picked by one who can tell the good mushroom from the bad. If one wishes to be protected from death of cancer of the skin, one should consult one's medical adviser and find out whether the skin defect or defects are of the dangerous kind. If it is, it should be removed properly, and in this way one is protected from cancer.

It is quite possible that among one hundred individuals examined for congenital or acquired skin defects, in not more than five or ten will the dangerous kind be found, but these ten individuals will be protected from cancer, and the others will be assured of the innocence of their skin lesions and receive proper instruction what to do if these little lesions should begin to grow or new ones appear.

This message was given to the public in 1913 by Samuel Hopkinson Adams in the *Ladies' Home Journal* and other weekly and monthly magazines, and since then, through the efforts of the American Society for the Control of Cancer, this information has been widely distributed through the press and by lectures. Today every hospital clinic in the country has the records of many individuals whose lives have been saved by this little bit of correct information.

CANCER OF THE LIP, TONGUE AND MUCOUS MEMBRANE LINING OF THE MOUTH IS A PREVENTABLE DISEASE.

Anyone who has read the information distributed by the American Society for the Control of Cancer has become familiar with the relationship between chronic irritation and cancer. In the days of the chimney-sweep, the soot and dirt which covered the men who cleaned the chimneys caused, in a certain number, cancer of the scrotum. The women of an ignorant, partially civilized colored race, who constantly hold in their mouths the irritating juice of the betel nut, are very prone to die of cancer of the mouth. However, there is a better example of the relation of chronic irritation to cancer in the most civilized and educated races,—the cancer of the lip, tongue and mouth in smokers who allow their teeth to become ragged and dirty for years. It is quite true that the irritation of tobacco and ragged, dirty teeth does not always produce cancer of the mouth, but we rarely see cancer of the mouth except in individuals who for years have smoked, chewed or used snuff, and who, in addition, have ragged,

dirty teeth and who rarely, if ever, see a dentist.

Fortunately, the majority of us have something in our bodies which protects us from the growth of cancer. Otherwise thousands of men would die yearly of cancer of the mouth, while as a matter of fact only a few thousand of men die of this in this country. The lives of these few thousands who die of cancer of the mouth can and should be protected. To keep the teeth clean and smooth is an essential part of personal hygiene in every individual, and especially so in anyone who uses tobacco in any form.

Everyone who observes on the lip, tongue or mouth a fever blister, a canker sore, a red area, an unhealed sore of any kind, an area of irritation, or anything that can be seen and felt different from the normal mucous membrane, should stop the use of tobacco in any form and see their dentist and medical adviser. Smokers who observe burns on the lip, or white patches (leucoplakia) on the lip, tongue or mouth should discontinue the use of tobacco in any form.

We have the positive evidence that this simple information has saved and is saving many lives. In the first ten years of the experience of one clinic in this country (to 1900) but one man consulted the surgeons of the clinic for a sore on the tongue that was *not* cancer—three per cent. of the cases. In this same clinic since 1920 over 55 per cent. of the individuals who seek advice because of a sore tongue have not reached the stage of cancer and can be protected. In this same clinic up to 1900 but one man came under observation with an early cancer of the tongue, and this individual was cured. He represented about three per cent. of the individuals with cancer of the tongue. In this clinic since 1920 the per cent. of early cancers of the tongue has increased to 40 per cent., and hopeless cancer has been reduced from 48 to 11 per cent. The chances of curing an early cancer of the tongue are about 70 per cent., of the late cancer less than 10 per cent. But no informed individual should allow a cancer of the mouth to develop. It is a preventable disease, a disease of dirt and ignorance, and should be eliminated from the world by education.

THE UNUSUAL DISCHARGE.

It is pitiful to think that more than 12,000 women who have borne the children of this country die of cancer of the neck of the womb (uterus) each year. It is more than pitiful when we seem to have evidence that these deaths are largely preventable.

The first warnings of cancer of the uterus do not differ from conditions that are not cancer and may never become cancer. But the warnings are distinct and every woman will be aware of them. That no attention is paid to these warnings is due to ignorance. It is the duty and obligation of the medical profession to overcome ignorance by correct information.

This is especially true because now we have the evidence that this correct information should largely protect women from death of cancer of the uterus.

Every woman is familiar with the so-called monthly periods. If any unusual change is observed in the character, duration, or time of this discharge, or if this discharge reappears after the change of life, she should consult her medical adviser at once.

This message should not create fear, because in the large majority of cases a short questioning by the trained medical adviser will lead to the conclusion that it is a symptom of nothing serious. In some cases an examination will have to be made. After this, in the larger number of cases, the patient will be told that there is nothing wrong. In a few instances, however, the patient will have to go to a hospital and a thorough examination made under gas anesthesia, and some bits of tissue removed for microscopic examination. In a very small number of these cases conditions which precede cancer will be found, and in a still smaller number early cancer will be revealed. We have sufficient evidence at present to proclaim to the world that the majority of these early cancers, discovered by this early examination, will be cured.

Such an examination may also reveal conditions of the pelvic organs which have no relation to cancer, but which, if properly corrected, will protect the individual from subsequent ill health.

This simple message and correct information in regard to the unusual discharge in adult women is the only method of attack which will reduce the large number of deaths from cancer of the uterus. It is a distinct example that correct information, so distributed that it can be understood by all, is the only hope at present for reducing the number of deaths from cancer.

There is no doubt that cancer develops in local conditions that are not cancer. These local conditions have definite symptoms. The individual is aware of them. If they can be educated to seek examination in this period they can be protected from cancer.

At the present time we have established treatment for early cancer, and cancer can and should be recognized in this very early stage, and the majority of these cases are cured. We have no other treatment for late cancer, and this treatment rarely cures. Late cancer is due to ignorance. It is the duty of the medical profession to correct this ignorance. It is the duty of the press, and of every other agency or group of individuals who are able to help the medical profession, to carry this correct message to the people.

WHAT KIND OF INDIGESTION HAVE YOU GOT?

Up to the present time the efforts of the

Society for the Control of Cancer to educate the people in regard to indigestion have apparently had little or no effect on reducing the number of deaths from cancer of the stomach, cancer of the colon (large gut), and cancer of the rectum, and all kinds of cancer within the abdomen. These unfortunate patients still come to the surgical clinics of the country in the late stage of cancer. Yet, the histories of these patients show that they have known that they have been ill for months or years. Many have never consulted a doctor, but have tried to treat themselves by patent medicines and different kinds of diet.

Fortunately, the majority of patients who suffer from the different kinds of indigestion do not develop a cancer. Many of them carry their indigestion to their graves at a ripe old age.

The medical profession feels that they can reduce the number of deaths from cancer of stomach, colon and rectum, by getting the people to be more interested in the kind of indigestion they suffer from, to excite their curiosity as to its cause rather than stimulate their hope to get some medicine or food for its relief.

The first thing to do for indigestion is to find its cause, and, if possible, to remove the cause. This means a thorough examination by some trained member of the medical profession. Many questions must be asked about your symptoms; x-rays must be made after taking bismuth by the mouth; the rectum must be examined with the finger and an electrically lighted proctoscope; a stomach tube must be passed and the chemistry of the gastric juice analyzed; a specimen of the blood and urine must be studied chemically and microscopically.

To the majority, this examination seems formidable. With the exception of the stomach tube, it is not, and the common report of the discomfort of swallowing a rubber tube, like Mark Twain's death, is "grossly exaggerated."

Deaths from cancer of the stomach, colon and rectum will never be reduced until the public are educated to demand such an examination by an expert member of the medical profession, or in one of the hospital clinics of the country. We should change the expression "take your medicine" to that of "take your examination."

Everyone is familiar with indigestion. The message or symptoms come from that part of your body called the abdomen or "belly." This is a cavity below the diaphragm and above the pelvis. You may have discomfort, pain, colic, nausea, vomiting, belching of gas, heartburn, constipation, diarrhea, blood in the stools; the abdomen may distend, it may become tender. These symptoms may be brought on by food or not; they may be relieved by starvation or not; you may lose weight or not; you may or may not be jaundiced or yellow. But whatever the character, whatever the severity, the right

thing to do is to seek an examination and find out the cause. Often the examination ceases at the end of a careful history. All the examination may not necessarily be made, but the essential thing is the examination.

Carry in your mind that ringing sentence of one of the patriots of this country: "Millions for defense, and not one cent for tribute"—and translate it: "Millions for examination and not one cent for treatment until the examination is as complete as possible."

LUMPS WHICH CAN BE FELT BENEATH THE SKIN,
AND PAIN AND SWELLING OF BONES
AND JOINTS.

When one feels a lump beneath the skin, no matter how superficial or how deep, or whether it is painful or not, or whether it is growing or not, don't believe your friend who tells you that it is a fatty tumor and watch it. Go to your family physician for a careful examination. In a few instances the skilled examiner will be able to tell you that it is an innocent lump and you can continue to carry it if you like. In the majority of cases the most skilled examiner cannot tell what it is, but he will know that the best thing to do is to have this lump properly removed. If it is properly removed it makes little difference what the microscope shows, even a cancer. The chances of a cure are splendid, and, no matter what it is, the only treatment is its proper removal.

If a child or adult has a pain or swelling of a bone or joint, or limbs, don't be satisfied by calling it rheumatism or "growing pains," but see your family physician; and the most important examination is with the x-ray. The majority of diseases of the bones and joints are not cancer, but this immediate examination will reveal the condition. If it is cancer, there will never be a better opportunity for a permanent cure. If it is not cancer, there never will be a better chance for a cure with the least loss of function or crippling. The diagnosis of conditions of the bones and joints as rheumatism, and their treatment with so-called anti-rheumatic drugs, has caused many cripples, has sacrificed many limbs, and has led to the death in the majority of cases, of cancer. The medical profession is giving you this correct information. All you will have to do is to act quickly and select for your adviser a responsible and educated member of the medical profession. Guard against the false promises of those who promise a cure without this thorough examination.

CANCER OF THE PROSTATE, BLADDER AND KIDNEY.

The instruments of precision and the expert methods of examination which have been developed by members of the medical profession called urologists are far in advance of the education of the people to avail themselves of this thorough examination which will detect condi-

tions that are not cancer and the earliest stage of cancer.

Every individual with trouble with the prostate, bladder or kidney will be amply warned. There may be an attack of pain in the region of the kidney, called kidney colic; blood or other changes will be seen in the urine; there will be difficulty or frequency in passing of urine. In the majority of cases the beginning symptoms are slight and insidious, intermittent, with periods of comfort; and the majority of people delay. With this correct information there need be but one warning, then seek an examination at once. If early cancer is revealed, the chances of a cure are splendid. But in the majority of instances it will not be cancer, but something less serious and of a character which, if left alone, will gradually lead to a serious disease of the prostate, bladder or kidney.

We have in this country now a group of urologists trained not only in this examination, but in the treatment of the conditions revealed by this examination. The better results of their treatment depend entirely upon educating the public not only to pay more attention to the first symptoms, but to seek and demand this thorough examination at once.

BRAIN TUMORS AND TUMORS OF THE SPINAL CORD.

The development of the diagnosis and treatment of brain tumors has recently advanced as rapidly as that of the expert diagnosis and treatment of the disease of the prostate, bladder and kidney. However, the large number of failures to permanently cure, and the added dangers of the operation on brain tumors is due to the ignorance of the public on the recognition of the early warnings or symptoms and their delay to seek proper examination.

Headache, intermittent, continuous, of any character; nausea, vertigo, instability when standing or walking, mental irritability, and any difficulty in seeing are by no means a sign of a serious condition in the brain or spinal cord, nor necessarily of any trouble there, but when these warnings and symptoms come in child or adult, an immediate and thorough examination by one especially trained in this department of the medical sciences should be sought.

WIRUNG TO RIOLAN ON THE PANCREATIC DUCT, AND RIOLAN'S REPLY.*

BY JOHN DONLEY, M.D., PROVIDENCE, R. I.

As we read the letters of Gui Patin and the satirical thrusts of Molière we can form no high opinion of the scientific attainments of the Medical Faculty at Paris in the seventeenth century.

*Read at a meeting of the Harvard Medical Society, Peter Bent Brigham Hospital, November 7, 1922.

The vigorous and productive philosophical tradition of such thinkers as Abelard and Aquinas had evaporated in the sterile disputations of decadent scholastics who loved words more than things, while in Medicine the dead hand of Galen still shadowed the minds of physicians. But poor enough as these men were in the spirit and method of progress, just then so widespread in Europe, they were held in high regard by the majority of their learned contemporaries, and to be Dean of the Medical Faculty of Paris must have seemed the crown of medical achievement to any man. Hence it was that when adversaries, many of them illustrious men, rose up to confute Harvey on every side, he judged none worthy of his pen except John Riolan, whom he addressed as the "Coryphaeus of Anatomists, Regius Professor of Anatomy and Botany in the University of Paris, Dean of the Same University and First Physician to the Queen, Mother of Louis XIII." So likewise when John George Wirsung, dissecting at Padua under Vesling discovers an undescribed duct in the pancreas, he writes to his old teacher Riolan, announcing his discovery and asking what the uses of this duct may be. Riolan replies to his pupil in sonorous Latin and as becomes so eminent a man, the acknowledged prince of anatomists, for such indeed he was; he settles just what the pancreas and its duct are about, with never a suspicion concerning the infallibility of his outworn Galenic physiology.

Riolan seems to have possessed a talent for defending lost causes. He was with Marie de Médecis against Richelieu; with the ancients against Harvey; with Galen against Pecquet. He would have no commerce with those pernicious innovators who were troubling the medical waters, the chemists sprung from the loins of Paracelsus, and he stood for all ancient privilege whether of mind or manners, being as Hazon remarks, the very shield of the Medical Faculty. He lived to the venerable age of eighty, suffered much in his last years from stone in the bladder, and died at Paris, February 19, 1657.

As to Wirsung there is not much to remark except that he was a Bavarian by birth, studied medicine at Padua under Vesling and at Paris under Riolan, and was killed in a duel with a Dalmatian physician before he had published anything. He was the first to discover the duct of the pancreas in man, although before him other anatomists had found it in animals.

Wirsung's letter and Riolan's reply, which I have attempted to translate, are taken from the latter's *Opuscula Anatomica Nova*, published from the type of Milo Flesher at London, 1649.

Wirsung's letter to Riolan.

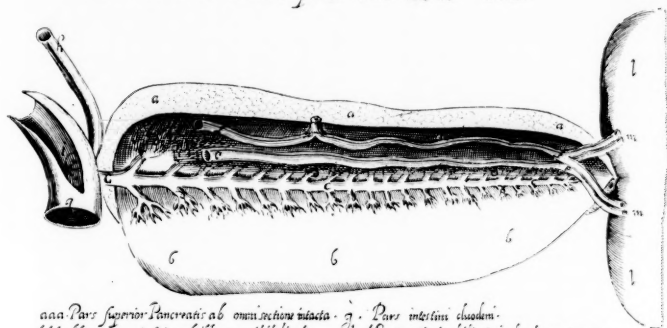
As recollection, even though it be at a distance, revives tender friendship, so is it with me, most distinguished and exalted friend, whom I ever hold in the greatest honor; and

although for twenty-three successive years I have been deprived of your illustrious presence, the guiding light of my anatomical studies, yet I cannot refrain from calling to mind the most affectionate memories of you throughout the whole period of our association, but more especially of that part of it when I was first imbued with your teachings and instructed by your so lucid demonstrations. So once again do I return you thanks for your accumulated favors on my behalf, the while I recall the unique impression your faithfulness stamped upon my mind. Of these things my eminent friend and former teacher, Caspar Hofmann, Professor at Altorf, will bear me witness. At his suggestion it is that I am troubling you with these few lines, as on previous occasions I have made bold to do. No less urgent also has been my eminent friend Paul Marquard Slegel, Professor at Jena, and all of those who have come from your school at Paris to ours at Padua, as the learned bearer of this letter will make clear to you. I have requested the renowned Hofmann that he himself write to you and ask your opinion concerning the use and action of a certain duct recently discovered in the pancreas; but from neither of you have I thus far received any reply, a failure I can attribute only to the circumstance of great distance and the difficulty of forwarding letters. But now a favorable opportunity having arisen in the person of the present bearer of this letter, once more I turn to you with all deference; and as formerly, so also now, I recur to the true well-spring and source whence I set out.

The aforesaid duct, of which you have a drawing herewith, may be described as follows: its mouth or beginning, if one may properly call that the beginning where the trunk is larger, opens from the duodenum along with the common bile duct, and admits a small steel rod with difficulty when this is passed from the intestine toward the pancreas, but with ease when it is directed from the pancreas toward the intestine. The duct pursues its course in the center and throughout the whole length of the pancreas toward the spleen, and having divided into numberless ramifications it distributes itself in the form of very small circular loops along the sides of the pancreas, above, below and beneath the splenic vessels. It does not reach the spleen which I have sometimes found to be double in human beings as well as in the lower animals,—a shorter portion occupying its usual place and a longer lying a little lower down. Moreover I have discovered this duct not in human adults only but also in infants and in foetuses; nay more, I have seen it in apes, dogs, cats, pigs, fowl, mice and frogs, in all animals, indeed, where I have diligently sought for it.

Shall I call it an artery or a vein? I have never encountered blood within it, but rather a peculiar juice which stains a silver rod like

*Figura ductus cruminalis cum multiplicitate sui ramuli roridis in Pancreate à Jo: Georg: Wirsung
Tab: et Tab: D in duarum corporibus hanc observati*



aaa Pars superior Pancreatis ab omni sectione intacta. g. Pars inferior eadem.
bbb Altera pars inferior ab illa nonnullis divisa. h. Mucosus Venae bilis in glandulam intertus.
ccc Ductus ille per longissimum Pancreatis extenditur. i. Orificium eiusdem munitum.
d d d d d Ramuli eadem ductus per universa in pancreas dispersi. k. Orificium ductus roridis insensibilis.
ee Vena Splenica. ll. Pars lionis.
ff. Arteria Splenica. m. Glandulae Vascorum in finem. f. Tab: 1642.

bile. The question is open as to what it is and what use and action it may have. Since, however, these things are not clear to me, I humbly submit them to your judgment and criticism, knowing full well that if you determine anything certain in this matter, you will not fail, with your customary friendliness and benevolence, to reveal it to me partly that the truth which you have always fearlessly championed may shine forth and partly also that this question having been settled, I shall be the more able to augment your fame which I pledge myself to do as long as my hands, taught by you, can guide a scalpel. And now lest I impose too much upon your patience, I shall say no more except to wish you health and to ask that you will not cease to hold in affectionate regard, your erstwhile pupil. Given at Padua, 7 July, 1643.

To your Excellency,

With all reverence and respect,

JOHN GEORGE WIRSUNG.

To the Learned and Skilful Physician Wirsung, Professor of Anatomy and Surgery, from John Riolan, First Physician to the Queen Mother, Regius Professor of Anatomy and Pharmacy and Dean of the College of Professors.

You recall me to my anatomical studies which for a decade I have foregone, the while I was attached to the Court of the Queen Mother as First Physician to Her Majesty. A participant in her misfortunes and a traveller in divers places with her distraught household, I was unable tranquilly to court the Muses of Anatomy, since I was far removed from my

anatomical theatre in Paris and my beloved library which is now the solace and delight of my old age. And so it affords me much pleasure to accept your courteous invitation to express myself concerning the duct discovered by you in the pancreas. To begin with I cannot but praise your industry and adroitness in anatomical research since you have brought to light something which, though visible in many handlings of the pancreas, had quite escaped my observation; although I had already known from Fallopius that he himself had discovered in the pancreas certain small vessels which were quite distinct from those in the liver and which contained an oily humor abounding in the organ and causing it to swell. This fiction of Fallopius I have already adjudicated and have expressed my opinion thereon in the enlarged French edition of my *Anthropographia* which I have given to the translator. Furthermore I have noticed many veins interspersed through the pancreas, which veins I was the first to name "pancreatic." But your figure, accurately depicting the course of the pancreatic duct, impels me to praise of your admirable discovery, so helpful to the study and cure of hypochondriacal diseases,—a discovery which I judge to equal, nay, even to surpass in importance, the discovery of the lacteal vessels; and this too, as I shall explain briefly, without any prejudice to Aselli, an outstanding physician and anatomist. I shall assume the form of the duct to be such as you have represented it, for thus far I have had no opportunity of observing it in the bodies of those who had been hanged nor in those dead

in public hospitals from pollution of the air. So much being premised, I say then that to no anatomist except Fernel was the proper use of the pancreas truly known. For all are deceived who think the pancreas to be an emunctory of the stomach, as are those who would make of it a bed for the portal vein and the splenic vessel, and likewise those who believe it to be a kind of sponge for absorbing the vapors from the food. The learned Wirsung supports the opinion that the pancreas prepares the chyle before it is conveyed to the liver and that the chyliferous vessels converge to the pancreas, whence they pass to the liver. Now the transverse situation of the duct, its deep position in the pancreas, its opening into the duodenum alongside of the common bile-duct,—all clearly show that each duct was fashioned for similar uses: for just as the bile-duct prolonged directly from the liver into the intestine carries the crude bile separated out from the radicals of the porta and the deeper-lying parts of the liver, so does the other duct remove the viscid and cruder bile mixed with phlegm which has been separated from the chyle by the pancreas and discharges it likewise into the intestine. Wherefore I call the pancreas the emunctory of the liver and the spleen, inasmuch as it purifies the chyle traversing its substance. The chyle does not leave the vessels but remains within them to be received into the gland-like substance of the pancreas which collects from this side and from that the branching lacteal veins and purges the chyle of its impurities, unless indeed these have been already withdrawn by the glands of the mesentery or absorbed into the fatty tissues. But if the chyle were drawn from the duodenum through the mouth of the pancreatic duct, then these two untoward things would happen,—either the bile constantly flowing from the liver would be rapidly mixed and carried away with the chyle, and thus would the chyle be contaminated; or if vomiting were violent the humors would be forced out from the gall-bladder and from the liver by the intensity of the shaking and by the, so to say, convulsive movements of the stomach, which would agitate the surrounding parts: and at the same time the chyle, having undergone rubefaction, would be expelled from the pancreas in large quantity. But this is not observed to occur, for although a variety of humors is rejected in the vomitus such humors cannot derive solely from the liver and the gall-bladder. Nor can the spleen be relieved of its humors by vomiting except by way of its short vessel, which, even were it large enough in caliber and accustomed to evacuating impurities, is yet for the most part given over to nourishing the stomach. Therefore the pancreas supplies the largest portion of those humors, various and manifold, which, passing through its canal into the duodenum, flow presently into the stomach; thus is provided a short and

easy way of purging the first region of its excrement, which, accumulating in the liver, the pancreas and the spleen, firmly inheres there until Nature herself prepares it for excretion or until it has been liquefied by fomentations and so rendered fluid. In this way the impure humors of prolonged malignant fevers and of chronic diseases are driven from their hiding places in the pancreas and are expelled in the vomitus, for these humors are never amenable to medicaments evacuating through the inferior parts. Such is my opinion concerning the physiological uses and the medical significance of the pancreatic duct, which I submit to the critical judgment of yourself and of others learned in anatomical studies.

Medical Progress.

PROGRESS IN SURGERY.

BY EDWARD H. RISLEY, M.D., WATERTVILLE, MAINE.

Harry Jackson of Chicago in the April number of *Surgery, Gynecology and Obstetrics*, contributes a very valuable paper on the management of acute cranial injuries by the early, exact determination of intra-cerebral pressure and its relief by lumbar drainage. He believes that the relief of intra-cranial pressure can be obtained early and safely by repeated lumbar puncture, the relief so obtained prevents medullary compression, and the symptoms usually looked upon as indications for operation do not appear. Sub-temporal decompression does not adequately relieve pressure on the medulla, but lumbar pressure does and is sufficient often to prevent death.

He presents evidence from a clinical study of one hundred cases of acute cranial injury and experiments on dogs to establish the rationale of his treatment. He describes the routine treatment at the County Hospital and the mercury manometer used in determining the cerebral pressure accurately, and draws the following conclusions:

1. In most acute injuries of the brain, the cerebrospinal fluid pressure is a fair index as to the severity of the lesion. Dependable prognosis can be made by any increase or decrease of this pressure.

2. A new clinical classification of injuries of the brain based upon cerebrospinal fluid pressure alone, as shown by the mercury manometer, is superior to the accepted classification of concussion, contusion, and compression.

3. The pathogenesis of acute injuries of the brain demonstrates that the principal effect of oedema of the brain and hemorrhage is to interfere with the absorption of cerebrospinal fluid by the usual paths; this sets up a vicious circle causing further pressure on the brain by the accumulating fluid in the basal cisterns below the tentorium cerebelli and in the lateral

ventricles which presses the brain upward against the dura and produces cortical anemia. The cortical anaemia, if unrelieved, quickly leads to gliosis, causing lasting changes in the character, disposition, and mentality of the patient if he recovers from the brain injury.

4. The relief of the increased pressure on the brain and the re-establishment of the normal path of absorption of the cerebrospinal fluid can be obtained by repeated lumbar drainage—which in acute injury cases is absolutely without danger.

5. Lumbar drainage is superior to subtemporal decompression in relieving pressure below the tentorium cerebelli and has the further advantage that it leaves no mutilating skull defect. The use of concentrated salt solutions intravenously lowers cerebrospinal tension but does not remove blood.

Lilienthal reports the result of six years' work on thirty-one cases of resection of the lung for suppurative infections.

In fourteen of these in which a single lobe was removed for disease of that lobe, six died, or 42.8 per cent. In ten cases in which disease was not limited to a single lobe, and in which more was done than the removal of a single lobe, there were seven deaths, or 70 per cent. In the remaining seven cases, lobectomy had been intended but could not be completed, sometimes nothing but an exploration having been done. Five of these patients died, although there was no fatality on the table. One seems absolutely well one and one-half years after thoracotomy and mobilization, and the other case still has a bronchial fistula. These have been more or less unselected cases and although the mortality seems high, it is relatively not so.

Children and young adults are by far the best subjects. After the age of 55, the operation becomes extra-hazardous because the resiliency of the patient is impaired. With or without sepsis, it is the power of the heart to adapt itself which is perhaps the greatest factor in determining resistance. A patient with a bilateral suppuration would be considered an unsuitable subject, also those who have previously been operated upon and who have dense adhesions are poor surgical risks, and patients in whom other serious diseases, such as cardiac or renal, complicate.

A very careful bronchoscopy and x-ray examination with careful preoperative preparation is carried out. Team work in carrying out the operation is especially essential.

The author describes his system and his technique in detail, and concludes that chronic pulmonary suppurations, wholly or partially of the bronchiectatic type, are rarely curable without the extirpation of the pathological focus. The surgical removal of a single pulmonary lobe for chronic pus infection has a mortality of about 42 per cent.

CHOLECYSTENTEROSTOMY FROM AN EXPERIMENTAL STANDPOINT.

Gatewood and P. H. Poppens in *Surgery, Gynecology and Obstetrics* for October, 1922, report on experiments performed upon dogs in which gall-bladder was anastomosed to the stomach, duodenum, and colon, and draw the following conclusions:

1. The gall-bladder invariably becomes infected regardless of the viscous used for anastomosis.

2. There is little, if any, difference between the stomach and duodenum in the matter of rapidity of infection.

3. The colon is not the portion of the gastrointestinal tract to be chosen by preference. The immediate dangers of peritonitis are much greater, and probably liver infections would occur earlier than when the upper part of the gut is used.

4. All livers become infected sooner or later if the method employed in our experiments be followed.

5. Cholecystenterostomy, from an experimental standpoint, is not an operation to be recommended for use except in well-selected cases, such as carcinoma of the pancreas, where the temporary comfort of the patient is paramount, or irreparable common duct obstruction.

PATHOLOGICAL COMPLICATIONS WITH DUPLICATION OF THE RENAL PELVIS AND URETER (DOUBLE KIDNEY).

W. F. Braasch and Albert J. Scholl, Jr., in *Surgery, Gynecology and Obstetrics* for October, 1922, report one hundred and forty-four patients with duplication of the renal pelvis and ureter which have been observed at the Mayo Clinic. The incidence of aberrant and bilateral duplications of ureters and pelvis reported in the literature is relatively too high owing to the tendency to report the more unusual cases. Of the patients in this series the duplication was unilateral in 135 (94 per cent.) and bilateral in 9 (6 per cent.). Of the 135 patients with unilateral duplication 36 (25 per cent.) had complete duplication, and 99 (68.7 per cent.) had incomplete duplication. Of the 9 patients with bilateral duplications 8 had complete duplication and 1 had incomplete.

Duplication may vary from duplication confined to the renal pelvis to duplicate pelvis with separate ureters opening into the bladder. The pelvis are generally unequal in size, the upper being the smaller, and are separated by a bridge of normal renal cortex of variable extent. When an unusually small renal pelvis is outlined in the pyelogram, the possibility of duplication should be suspected.

Complete duplication will be discovered more often if a careful search is routinely made for anomaly at the time of cystoscopic inspection. In cases of partial duplication the diagnosis is made only by means of a pyelo-ureterogram.

The lower segment is primarily involved more often than the upper.

Hydronephrosis is the most common pathological complication and is due to ureteral obstruction, generally in the region of the juncture of the two ureters in cases of incomplete duplication.

In tuberculosis of double kidneys gross evidence of the disease is generally confined to one segment, usually the lower; but in all cases histological examination reveals tubercles in the intervening renal tissue and extending into the remaining segment.

Occasionally when only one pelvis is outlined by the pyelogram, its unusual shape and contour may be misconstrued with pathological changes occurring in single kidneys, such as atrophic pyelonephritis.

In the series of 144 cases, the histories of 19 of which are here reported, 30 patients were treated surgically, 24 patients had definite pathological conditions which did not require surgical treatment, and in 27 evidence of disease was doubtful. Only 61 (42 per cent.) of the patients were without pathological complications and the anomaly was discovered in the examination for other conditions.

Fifteen of the 30 patients operated on submitted to primary nephrectomies and 4 to heminephrectomies; 2 of these later required complete nephrectomy. Six pyelolithotomies and three ureterolithotomies were performed. In one patient hydronephrosis was relieved by the cutting of an aberrant vessel and in another symptoms were relieved by the ligation of an aberrant ureter from the upper pole of a double kidney.

In the treatment of pathological complications in a double kidney the indication for heminephrectomy is limited to but a few favorable cases. The possibility of infection extending to the remaining half of the resected kidney, which may necessitate subsequent complete nephrectomy, must be considered.

HYDATID CYSTS OF THE HEART.

H. W. Mills in *Surgery, Gynecology and Obstetrics*, October, 1922, reports a very interesting case which on post-mortem examination showed a well-developed hydatid cyst of the right ventricle of the heart. The author gives a short historical review reporting six other cases and a very good bibliography. These cases are extremely unusual and diagnosis has never been made before autopsy. Death has usually been sudden and unexplained on the usual pathological grounds except in cases where hydatid cyst has been known to exist in other parts of the body.

COMBINED TRANSPLEURAL AND TRANSPERITONEAL RESECTION OF THE THORACIC OESOPHAGUS AND THE CARDIA FOR CARCINOMA.

(HEDBLUM, C. A., *Surgery, Gynecology and Obstetrics*, September, 1922.)

This author reports a most interesting case in which the above operation was done for carcinoma involving the oesophagus and upper portion of the stomach. The operation followed a preliminary resection of the 5th-11th ribs and was performed under local anaesthesia and gas oxygen. The left pleural cavity, the left peritoneal cavity were opened widely, the diaphragm was split to the hiatus, the oesophageal stump was sutured to the skin edges in the middle axillary line and the gastric stump was brought to the surface near this line. The patient recovered from the operation and is able to take food by mouth through a tube connecting the two stomata. The case is reported in detail and illustrated with photographs.

FURTHER NOTES ON DISEASES OF THE UMBILICUS. (CULLEN, T. S., *Surgery, Gynecology and Obstetrics*, September, 1922.)

Cullen contributes one of his characteristically thorough, complete, and beautifully illustrated articles. He describes many bizarre conditions found at the umbilicus, all with most excellent photographs and drawings. Among these, he described cases of tetanus in the newborn due to careless treatment of the umbilical stump, various forms of granuloma of the umbilicus, polyps, Meckel's diverticulum found in the umbilicus, cysts, adeno-myoma, naevus, moles, papilloma, various forms of carcinoma, and various forms of hernia. The article is most interesting and instructive.

SOME EXPERIENCES WITH THE "MELTZER-LYON" TEST IN GALL-BLADDER DISEASE.

(ELLIOTT C. CUTLER and FRANCIS C. NEWTON, *Surgery, Gynecology and Obstetrics*, August, 1922.)

These authors have made a rather extensive investigation of this disease, and they make the following statements as a general summary of their work:

Interest in this procedure as an aid in both the diagnosis and treatment of biliary conditions has become widespread. Already it has reached the hands of the general practitioner, and in spite of the difficulty of carrying through its correct performance is in actual practice by a large number of doctors. This is exceptional in a profession usually conservative and leads one to think that the many careful studies already reported, which seem to show that the knowledge the test may give is unreliable, are not generally recognized. It is possible also that the strong psychic appeal any such a procedure must awaken in a patient has led doctors as well as patients into a false sense as to the real physical good this manoeuvre can give.

Following the above discussion, it is our opinion that there is much to be proven before the so-called "Meltzer-Lyon" test can be accepted as of value in aiding diagnosis, that it should still be considered as only in an experimental stage, and its use should be discouraged by any except those who are qualified and equipped to study and criticize its value. It is by no means a simple test. Should one grant all that Lyon claims for it, to be exact, it requires x-ray apparatus, much time, repeated examinations on all cases, and elaborate bacteriological and cytological studies. The test depends upon the law of contrary innervation which must be proven before the test is accepted. At the present time the evidence would seem to show that syphonage is the principal factor in the defection of bile into the duodenum. Exactly what determines the intensity of the color of the bile remains in question.

Our own experience has left us with the distinct impression that the test is not of dependable diagnostic aid. With its use in treatment except for a few rare cases we have no experience.

The lack of unanimity in the results obtained by different investigators is the best proof of the unreliable status of this test at the present time.

Jacobaeus of Stockholm presents a very interesting treatise on the practical importance of thoracoscopy in surgery of the chest. The author uses the endoscope in studying the pleural cavities and has found this method to be of extremely great value in the localizing of tumors and other pathology in the pleural cavity.

His article shows some very fine half-tone plates of his work, and he states that for the purpose of diagnosis and localization of pleural and pulmonary tumors it is of great importance to make an x-ray examination before as well as after the induction of pneumothorax. By making an x-ray examination after the induction of pneumothorax valuable information is obtained, which completes the information already obtained by the x-ray examination before the induction of pneumothorax. Thoracoscopic examination gives valuable information in diagnosing and localizing pleural and pulmonary tumors, and verifies the x-ray examination. If it is not possible to use a pressure-difference apparatus, it might be advantageous to induce pneumothorax previous to operation in the pleural cavity. If a pressure-difference apparatus be employed, then pneumothorax for the thoracoscopic examination ought to be induced as shortly before the operation as possible, in order that the inflation of the lung after the operation may not be rendered more difficult or impossible. If the lung is inflated after the operation, more favorable conditions for the course of healing are eventually obtained.

GASTRIC HEMORRHAGE.

(ARMSTRONG, GEORGE E., *Surgery, Gynecology and Obstetrics*, April, 1922.)

The author describes a case of gastric hemorrhage in which at operation, on opening the interior wall of the stomach, the region was filled with dark colored blood clot, but no fresh blood. When the blood clot was cleared up, the mucosa appeared normal, no abrasions, fissures, or ulcers could be seen. There was no bleeding or oozing even on handling and wiping the surface of the mucous membrane. On the following day, the patient vomited a large quantity of bright red blood and died in a few minutes.

The findings at the autopsy were absolutely negative. The blood showed an extremely delayed coagulation time.

The author called to attention other cases of a similar nature in which no bleeding point can be found in the stomach mucous membrane. These cases are never benefited by operation. The author pointed out as his experience the opinion that he now invariably transfuses cases of gastric hemorrhage preparatory to study and possible later operation. Transfusion practically always puts a stop to the immediate hemorrhage, and oftentimes is all that is necessary to cure the patient. This is a thing worth while remembering in considering operation on these cases.

AN EXPERIMENTAL STUDY OF URETERODUODENOSTOMY.

(HINMAN, F., AND BELT, A. E., *Journal of the American Medical Association*, Dec. 2, 1922.)

These authors draw conclusions as follows:

1. It is possible successfully to transplant a ureter into the duodenum with little if any evidence, subsequently, of infection or of back pressure, even for as long a period as 440 days.
2. After a surgically successful ureteroduodenostomy, the kidney continues for some time to function and to excrete urine into the duodenum.
3. When the total urinary excretion is poured into the duodenum, as after unilateral ureteroduodenostomy and opposite nephrectomy or bilateral ureteroduodenostomy, the animal dies within twelve days; with marked retention of nitrogenous substances in the blood, and symptoms identical with those following bilateral nephrectomy, except for a severe diarrhea in the terminal stages.
4. Recovery of an animal so treated, even on the eighth or ninth day, follows ureteral transplantation from the duodenum to the skin. Uremic and other symptoms rapidly disappear, with pronounced diuresis and the return of blood nitrogen to a normal level.
5. These facts indicate that most, if not all, of the constituents of the urine are readily reabsorbed from the intestines after successful ureteroduodenostomy.
6. Successful unilateral ureteroduodenos-

tomy without disturbance of the opposite kidney doubles the work of this kidney as effectively as nephrectomy, and the opposite kidney undergoes compensatory hypertrophy just as quickly and completely as it does after nephrectomy.

7. The kidney whose ureter has been successfully transplanted to the duodenum, as it also gets double stimulation in the blood, undergoes reparatory changes in every way similar and parallel to those of its compensatory mate, and the anomalous condition of a bilateral hypertrophy will persist for several months.

8. Eventually, in the course of from one to two years, after successful unilateral uretero-duodenostomy, the kidney pouring the products of its activity into the duodenum is found to have undergone marked, if not complete, atrophy, while its mate remains healthy and hypertrophic and continues to perform total function efficiently.

Book Reviews.

Principles and Practice of X-Ray Technic for Diagnosis. By JOHN A. METZGER, M.D., Roentgenologist to the School for Graduates of Medicine, Medical Department, University of California, Southern Division, Los Angeles. Contains 144 pages, 61 illustrations and glossary of electro-medical terms. C. V. Mosby Co., St. Louis, 1922.

The author's aim in the preparation of this book is to put into the hands of the student or operator a formula on which to base his work in order that he may obtain better results and thus be able to reach a more correct diagnostic interpretation.

Dangers incident to the use of x-rays are briefly but well stated and there is an excellent chapter on the use of the Bucky Diaphragm, also on the method of marking and handling plates.

The positions which the author recommends for radiographing various parts of the body are those usually accepted. They are well described in the text, and the accompanying illustrations are good. This part of the work is complete and should be of definite help to anyone beginning the work, also of interest to the trained man. Following the description of the exposure position for each part, there is a formula for the time, distance, voltage and milliamperage to be used.

In describing the technic to be used in the examination of the gastrointestinal tract, the author includes the preparation of the patient and the method of conducting a fluoroscopic examination with an outline of the observations to be made. The gall-bladder and urinary tract are handled in a similar manner.

The method of making and studying stereo-

grams and of the localization of foreign bodies in the eye are also described.

The definitions of electro-medical terms are not well chosen and some of them are incorrect. One might also criticize in a similar way the author's description of the Coolidge tube, but, on the whole, the book is one which could be used in teaching the various positions and should be of considerable help to the practitioner who is doing a certain amount of radiographic work.

Nervous Ills—Their Cause and Cure. By BORIS SIDIS, M. D. Boston, Mass.: Richard G. Badger.

This book is worth reading. To evaluate it properly one should know something of its author and his history. Sidis, a Slav by birth, a disciple of William James, a psychopathologist by training, and a doctor of medicine as an afterthought, has the enthusiasms, originality, and brilliancy of many of his race, but has been handicapped by a tendency to intellectual arrogance and intolerance that has isolated him, and left him without the recognition that is his due.

In his new book, he presents again with many repetitions, the thesis which he published some years ago in his book entitled, "The Causation and Treatment of Psychopathic Diseases." In this new book, he adds little, and has made the mistake of including testimonials from his patients and eulogistic comments from other psychopathologists.

His thesis briefly is this: The instinct for self-preservation with its accompanying emotion of fear is the strongest and most persistent instinct in life. Normal fear is stimulating and beneficial. Excessive fear is the *sine qua non* of psychopathic diseases. Proper treatment consists in reducing this excessive fear to normal limits, and this is best accomplished by suggestion in the hypnoidal state.

The general practitioner, nauseated with the excessive sexual trends of the disciples of Freud, will welcome many of Sidis' statements with interest and relief. For example: "The ordinary, healthy minded, and vigorous practitioner sees a lot of motives in life that are not sexual, and where everything is twisted and turned to one side, to one 'complex,' he becomes indignant and disgusted, and condemns the whole broad subject of Psychopathology." He quotes one physician and then writes on: "As a matter of fact, psychoanalysis by which Freud and his adherents have baptized their sexual theories and metaphysical wish-speculations, should be regarded as savage and barbaric. Psychoanalysis is a sort of astrology, full of superstitious symbolizations, dream vagaries and idle interpretations foisted on the credulous, on those obsessed by sexual inclinations, and on those suffering from sexual perversions. It is idle and credulous to search in adults for 'unconscious' memories of babies a few months

old. Many take up psychoanalysis as a sort of mental masturbation, which in the long run is sure to play havoc with their nerve and mind. Psychoanalysis belongs to the class of dangerous superstitions harmful to health, both social and individual. Freudian psychoanalysis should be openly declared as a fraud. What common ground is there between science and superstition? There is no common ground between psychoanalysis and psychopathology. That is why it is just as impossible to argue with a psychoanalyst as with a Mormon or a Moham-medan. It is futile to discuss psychological and medical matters with psychoanalysts. It is useless to argue with psychoanalysts, who as a rule possess no more critical sense than Mormon saints."

Many a reader of Sidis' book will get a new angle on functional disease, and will be able to think again of the unconscious with seriousness and without blushing or disgust.

Diseases of the Heart. A Handbook for Students and Practitioners. By I. HARRIS, M.D., L.R.C.P. (Ed.), Honorary Physician in Charge, Cardiographic Department, Liverpool Northern Hospital. Pp. 196; illustrated, price \$3.50. William Wood and Company, New York, 1922.

The author states that the object of his book is to give a complete account of cardiology, old and new, in as concise a form as possible. The material is presented in eight chapters, as follows: Methods of Examination and Physical Signs, Heart Failure, Symptoms and Signs Arising from a Damaged Heart, Chronic Affections of the Heart Muscle, Diseases of Other Organs as They Affect the Heart, Carditis, Chronic Valvular Disease, Treatment.

The presence of a circus movement in fibrillation of the auricles is swept aside as being "very improbable." Harris then offers the following hypothesis: In the normal heart muscle all fibers are functionally continuous, so that the whole heart becomes functionally like one fiber. (This is not the case with skeletal muscle.) It is possible before fibrillation appears some of the structural or functional connections become damaged, as a result of factors mentioned above. Under the circumstances single or whole blocks of fibers become functionally disconnected. The exciting waves do not need to have a multiple origin, but may start as a single wave, say, from the normal pacemaker. It will pass to some bundle of fibers in the neighborhood; from there it will travel in every direction where a "bridge" renders further progress possible. The same wave will affect first one bundle and afterwards another. Its path will be irregular; it might even form a circus for a while. But while the first wave is still lingering in some outlying districts of the auricle, a new wave

may already have started from the same place as before.

Regardless of the merits of the above theory, one is not favorably impressed by the author's entire failure to discuss the evidence, presented by Mines, of the occurrence of circus motion and, later, the demonstration by Lewis and his co-workers of the presence of this phenomenon in the heart affected by fibrillation and flutter, or to give reference to any papers wherein he has done so. In fact, the value of the book is lessened by a complete absence of references to the literature.

It is doubtless a difficult matter to present successfully the subject of cardiology in small compass; there is a certain minimum of facts that must be included. The reviewer is of the opinion that in this book clarity and accuracy have been sacrificed to brevity.

It is doubtful if the book will find favor with those who have been following the recent progress of cardiology; there is not enough on the importance of the activity of the infection and rather too much stress on the purely mechanical conception of heart disease.

The discussion of the use of digitalis is certainly inadequate. Doses of 30 and 5 minims per day are recommended. The Eggleston method or any modification of it whereby the amount of the drug necessary for digitalization may be calculated in relation to the body weight of the patient, is passed over in silence.

There are many small points wherein the reviewer does not agree with Harris, but their discussion is not necessary; it is probable that some of these are due to too great brevity of the text. Taken as a whole, the book is not really bad, neither is it good; perhaps unsatisfactory is the proper adjective to apply.

An Outline of the Pirquet System of Nutrition.

By DR. CLEMENS PIQUET. Published by W. B. Saunders Company.

Dr. Pirquet has given in English in this small manual of one hundred pages a brief but clear exposition of his system of nutrition.

The object of the system is to find out "whether the child has the amount of muscular and fatty tissue corresponding to the height and skeleton." Dr. Pirquet has utilized the sitting height as a standard of body measurement and shown that it bears a definite relation to the cube root of ten times the weight in grams. The author then attempts to discover the exact food intake needed for the child of various sitting heights. He assumes that "the amount" of oxidizable intake in the form of food is the criterion for the child's demands. He furthermore notes that the spontaneous intake bears a close relation between the two-thirds power of the weight and the square of the sitting height. The further chapters in the book deal with the "nem" which is the "nu-

tritive combustible value of one gram of milk." This unit is used in the place of the ordinary caloric method of feeding. The further chapters are devoted to the practical application of the author's principles referring to the feeding in the first year of life, to the dietetic treatment of tuberculosis and a final chapter on feeding as preventative medicine. The book contains a so-called "Pelidiei" table, which represents the ratio for an individual as an index of changes in the nutritional state.

Diseases of Children. Medical and Surgical. By ASHBY AND WRIGHT. Revised by H. T. ASHBY AND C. ROBERTS.

This book, one of the Oxford Medical publications now in its sixth edition, gives, as the authors state in their original preface, a condensed account of the various morbid conditions peculiar to or found chiefly during infancy and childhood. The text has been thoroughly revised and recent advancements on the subject have been incorporated in the 730 pages of this edition. The volume is characterized by the comprehensive treatment of the subject, its concise and clear presentation of the various diseases and the authoritative manner in which it is written. It contains no references to the literature, but the book has a very convincing style because it is based upon the personal knowledge of the authors, which has been extended over a long period of years. There are few similar text books which treat both the surgical and medical aspects of pediatric problems in such a complete and well correlated manner.

There are certain chapters in the text which, because of their pediatric importance, could properly have been written in more detail. This is notably true of the chapter on infant feeding. Brief reference is made to the various foods used, but no attempt is made to elucidate a rationale of feeding based on a physiological standard. The book also fails to emphasize the preventative side of diseases. This is well illustrated in chapters on tuberculosis and cardiac diseases.

The book is to be highly recommended to medical students because of its clear presentation of the subject from a medical and surgical point of view.

Public Relief of Sickness. By GERALD MORGAN. 195 pages. The Macmillan Company, New York.

In the consideration of this important question the author first reviews the general aspects of sickness and poverty, the availability of medical treatment and of voluntary insurance. He shows that at present much poverty is due to sickness, and a not inconsiderable amount of sickness is due to poverty. Present facilities

for medical treatment are insufficient for all but the well-to-do.

Morgan then describes briefly, yet with enough detail to bring out the important points, the state-aided voluntary insurance as employed in Denmark, the method of cash relief and medical treatment by compulsory insurance as followed in Germany, and the same method as worked out in England. He points out the defects in all these systems.

The scheme which he advocates is the plan contemplated in the Health Insurance legislation introduced into the New York State Legislature in 1920-21. This legislation did not pass, but Morgan hopes that it will do so at some future date. The chief difference between this plan and the plans adopted abroad lies in the divorce of cash benefits and medical relief. The former is a simple matter, easily carried out. The latter, Morgan believes, can be best supplied through Health Centers. These would be supported by taxation, and the doctors who man them would be given "adequate compensation." The poor would be treated free, but everyone who could pay would be required to do so.

Morgan's reasoning seems very sound and his book is very well written. The style is simple and clear. Perhaps his conclusions are open to argument, but the subject is one which is bound to keep coming before the public, and upon which one's duty compels him to be informed.

Animal Parasites and Human Disease. By A. S. C. CHANDLER, M.S., Ph.D. Second Edition, Revised. New York: John Wiley & Sons, Inc. London: Chapman & Hall, Ltd. 1922.

This book of over 500 pages is not of formidable size. The subject-matter is divided into three parts, entitled, respectively, Protozoa, "Worms," and Arthropods. Under each of these heads are described the important parasites of man and the chief characteristics of the diseases caused by the parasites or transmitted through their agency. Simplicity of style and comparative freedom from technical terms render the book easy to read and should enable the layman having a superficial knowledge of zoology to understand most of what is said. Excellent illustrations help materially to clarify the text.

To the physician desiring rapidly to gain a general knowledge of the facts upon which are based most of the modern methods of controlling parasitic diseases, the book should prove of great value.

The Massachusetts Tuberculosis League will hold its annual meeting in Springfield, Mass., Thursday, Friday and Saturday, April 26, 27, and 28, 1923.

The League has invited the other health agencies to join with it in making this a general health conference.

ROBERT V. SPENCER,
Executive Secretary.

THE BOSTON Medical and Surgical Journal

Established in 1838

Published by The Massachusetts Medical Society under the jurisdiction of the following-named committee:

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THE COUNCIL MEETING, FEBRUARY 7, 1923.

The President called the meeting to order promptly and before proceeding with the business scheduled on the program, paid a merited tribute to the memory of Drs. R. W. Hastings and Thomas F. Greene, recently deceased.

He then called the attention of the Councillors to the necessity of active interest in legislative matters now pending, speaking especially of the antagonistic efforts of the Medical Liberty League and allied organizations toward the use of the Schick test and vaccination requirements. The members of the Society were especially urged to be present at the hearing scheduled for February 8, at which time arguments for the extension of the vaccination laws were to be presented. Attention was called to the meeting to be held in Washington to consider the plan for the formation of a new Federal Department of Health Education and Welfare.

The Committee of Arrangements for the Annual Meeting reported that although the transfer of the usual convocation to Pittsfield is an innovation the facilities will be ample and the plans contemplate, in addition to the scientific and business sessions, special social features.

Dr. Merrill of the local committee reported that ample accommodations will be provided

and ample time would be given to enjoy the resources of Pittsfield and the beauties of that section. Members are especially urged to bring their wives, for especial attention will be provided by the ladies of Pittsfield. He urged the members to make every effort to attend and test the hospitality of the city. Three sets of notices will be mailed to the Fellows from time to time so that the probable number of visitors may be known. Even though there may be some uncertainty as to attendance, it will be helpful if a tentative purpose is expressed. Twenty-five hundred dollars was voted for the use of the Committee of Arrangements.

The reports of the standing committees and the Treasurer were accepted. It was especially gratifying to learn that the treasury is augmented by the sum of \$12,099.65, the gain over the budget which is carried to surplus.

The President nominated Dr. J. B. Blake and Dr. C. F. Painter as delegates to attend the meetings in Chicago, March 5 to 7 inclusive, of the Council on Medical Education, Hospitals and Registration Boards, and the nominations were confirmed. Also on nomination by the President the following delegates to the state societies were appointed:

To Maine—Dr. C. A. Dennett of Arlington and Dr. F. M. Stiles of Waltham.

To New Hampshire—Dr. J. B. Blake of Boston and Dr. F. E. Sweetser of Merrimac.

To Rhode Island—Dr. W. Y. Fox of Taunton and George C. King of Fall River.

To Connecticut—Dr. W. A. Lane of Milton and H. F. R. Walls of Dorchester.

Delegates to the House of Delegates of the A. M. A.—Dr. F. B. Lund of Boston, alternate, Dr. W. H. Robey, Jr., of Boston and Dr. Edmund F. Cody of New Bedford, alternate, Dr. F. W. Anthony of Haverhill.

Dr. Mongan explained the situation relating to the payment of expenses of delegates to the House of Delegates which had, under a vote of the Council, been limited to \$100, and it was voted that the expenses of these delegates be paid by the Treasurer on presentation of an itemized account approved by the President within three months.

The budget as presented by the Committee on Finance was adopted. Dr. Painter presented the report of the Committee on Medical Education and Medical Diplomas. He explained that owing to past experience the Committee had decided not to present any bills to the Legislature this year, but that it is planned to bring before the meeting in Pittsfield a plan for removing certain restrictions relating to the appointment of members of the Board of Registration, for it is the opinion of the Committee that the Governor should be given the power to appoint men who are recognized as teachers of

medicine and also that the membership should not be restricted to a minority representation of any one medical society.

Dr. Bowers was called upon by the President to discuss this matter and presented a plan which, although probably not likely to meet with the approval of the Legislature, owing to the opposition of the low grade medical schools, would, if adopted, do away with many of the objectionable features of the present system. This plan would provide for the registration of graduates of recognized medical colleges without the necessity of an examination and would thereby eliminate the present difficulties relating to reciprocity. It would automatically raise the standards of low grade schools or put the graduates of unrecognized institutions in an unacceptable class. The report did not call for any action and was, therefore, a report of information.

Dr. Mongan spoke of the criticism sometimes expressed that the Society did not do much for its members and offered a resolution providing for a committee of seven to arrange for clinical meetings to be held in various parts of the State. This plan provides for exercises at a hospital in the forenoon, a luncheon, and a discussion in the afternoon of the material presented in the forenoon. This resolution was adopted.

Dr. Ayer suggested that there should be established a system of broadcasting medical information to the public. This was referred to the Committee of Seven.

Dr. Merrill reported for the committee appointed to consider the advisability of holding a New England medical meeting. He spoke of the recent meeting of representatives of several of the medical societies of the New England States and said that further action will follow drafting of some form of agreement and a tentative program which will be considered by the state societies.

The committee appointed to consider the problems of maternal and infant welfare presented a report which was signed by seven of the nine members, but was objected to by Dr. Mongan. He said that Dr. Dutton, of the Committee, agreed with him that the report was open to criticism in that certain words used were not scientific, that it was the opinion of the majority that the Department of Vital Statistics should be administered by a man trained in medicine, and that there should be no expression of opinion as to whether maternal deaths were increasing in number or otherwise. The report of the majority was accepted and the Committee discharged. The report of the minority was ordered to be received and recorded.

The meeting was well attended and careful attention given to the various matters presented.

The Secretary's report, in full, will appear later.

PROGRESS AND RESULTS IN CANCER CONTROL.

There is no better example of the difficulties and pitfalls which surround public health statistics, even for the most accomplished wielders of figures, than the widely varying views concerning the increased death rate from cancer in the United States. That the recorded crude death rate from cancer has increased no one at present doubts. But competent statisticians still differ concerning the far more important fact as to what portion of this record represents an actual increase, even though all possible precautions have been taken to eliminate errors due to our lack of information as to the age distribution of the population and the possibilities of incorrect diagnoses. Some hold that there is even a decrease in the lower age groups with a marked increase in the higher. Again, statistics based entirely upon autopsy records when compared for many years have shown curious fluctuations. For example, in Budapest, the rate of cancer of the stomach in males has remained the same for many years, while that of females has fallen to one-third during the same period. Here there can be no question of the accuracy of the diagnosis. Also, if it is realized, as was pointed out many years ago, that routine autopsies increase very considerably the number of deaths attributable to cancer, it is evident that a final solution of this difficult question must await an improvement in the methods of certifying and recording the causes of death before a final judgment can be achieved.

That to the success of surgery can be attributed the recent decrease in the recorded cancer death rate in the United States, or to its failure, the increase of the year 1921, is more than doubtful.

He who holds this view does not realize fully the fact that the vast majority of patients with cancer are perfectly hopeless when seen by the surgeon. For it is very questionable whether 10% of the persons in the United States who come for relief from malignant disease are operable when first seen and far from doubtful that any such percentage are cured. Growths in certain accessible sites such as the breast, lip, or skin, offer the best opportunity for good results, but the great group of carcinomata of the stomach, intestines, and liver and even of the uterus are, at the present time, too often hopeless when first seen, except in very rare instances, and that only in the larger centers where education and hospitalization of the population is very complete.

As an example of the inability of operative methods to make inroads against cancer under the present conditions, may be cited the very high rates in Switzerland, where, despite the admirable surgical clinics which have long offered the population of that small country the best of treatment, no effective checking of the

excessive cancer death rate, which has oscillated about 125 per 100,000 since 1895, is shown.

The extraordinary rise in the death rates in cities is a well known and world-wide phenomenon and rightly stressed by Hoffman, but must not be hastily assumed as showing a special liability in those of urban habits. Rather, such high rates show the educational value to the profession of hospital contacts, the high autopsy rate, which exposes many unsuspected cancers, and the degree to which professional skill attracts patients to the great city institutions.

Whatever, therefore, the outcome of the healthy discussion of cancer statistics pro and con, one thing is clear: Cancer is now known to be one of the most important causes of death after the age of forty and upon this disease should be brought to bear every possible means to check its ravages.

As there is no present evidence that radium or x-ray are nearly as successful as surgery in producing permanent cures, it is obvious that the attack must be made in a different direction and best by so educating the people of this country that they will regularly consult a physician as soon as they reach an age where they become liable to cancer and also by so educating the medical profession that they can recognize early cancer.

The second part of the problem is more difficult than the first because, while it is not a great task to excite people's fears concerning a disease whose fatal nature is universally known, it is difficult to instill into the average busy physician the necessity of the most complete and painstaking physical examination in order to be able to assure patients that they are not suffering from an internal cancer. Such assurance often requires prolonged and expensive laboratory and x-ray studies of the individual and may even imply the use of instruments like the cystoscope or laryngoscope, whose intelligent employment means a prolonged diagnostic training which but few of those in general practice have had the opportunity to obtain. It will evidently be many years before the results of the publicity methods of the Society for the Control of Cancer, which Hoffman rightly praises, can become generally effective in the diagnosis of any but the external and accessible varieties of cancer. Yet as these are responsible for some 20,000 deaths in the United States every year, a part of the task to which the Society has set itself may see its achievement in the near future. That will be no mean victory over so doughty a foe as cancer. In the meantime, however, the best test of the efficiency of the Society's propaganda will be an increase in the recorded death rate from cancer for the simple reason that when by publicity the attention of the public and the medical profession is more closely drawn to the obscurer types of internal cancer more frequent and more correct diagnoses will be made and recorded.

THE LEGISLATIVE ASPECT OF VOLUNTARY COMMITMENTS.

All bills now pending in the Legislature and all bills which may be introduced, the purpose of which is the curtailment of the privilege by which patients suffering from mental diseases may voluntarily obtain institutional care, should, in behalf of the public welfare, be vigorously opposed by the profession. No one except through ignorance or misunderstanding can sponsor such bills.

The Act passed by this Commonwealth permitting institutions to receive as voluntary patients certain cases mentally ill became operative in 1881, and has since been copied by other States. The rapid increase of its use (in some institutions over forty per cent. of the admissions being upon this basis) is testimony of the need and value of this method of admission. The law, as it has been interpreted for many years, has permitted institutions to receive patients suffering from mental illness without the formality, and stigma as considered by some, of a commitment, provided patients were desirous of entering the institution and were able to sign understandingly an application for admission and treatment. Such patients have the right, under the existing law, to make a demand for their discharge at any time and such demand must, within three days from the time it is made in writing to the superintendent, be granted, unless in the meantime a judge shall, upon the application of a relative or friend and upon the certificates of two physicians, issue an order of commitment. The law provides that these physicians shall not be connected with the institution; that they shall be satisfactory to the judge, and properly qualified according to the laws of Massachusetts, to make commitments. Moreover, upon the admission of such voluntary patients the superintendent of the institution is obliged to send to the State Department of Mental Diseases notification of such admissions with a statement of the patient's condition upon admission, and the Department of Mental Diseases has the same supervision over such voluntary cases as it does over the regularly committed cases. Thus it is evident that the rights of the individual are fully protected. Even if a patient, voluntarily admitted, becomes so ill that he does not know enough to demand his discharge, there can be no injustice in holding him under treatment. Moreover the question arises whether or not to commit such a patient does not constitute a breach of faith with him. As a matter of fact many patients upon recovery express relief and gratitude that they have not been committed under such circumstances.

The legislation which provided for voluntary admissions was a direct step in advance. It has made hospital treatment easily accessible to the mentally ill, as it is to the physically ill, and has

resulted in many persons seeking the benefit of hospital treatment early in the course of their illness, when the chances for recovery are greatest, who, if they were forced to submit to commitment, would undoubtedly forego such benefits until their condition became serious and possibly incurable.

Besides the direct benefit to the individual the working of the law permitting voluntary admissions to hospitals for mental diseases has been extremely valuable in educating the public to look upon mental disease in a rational way. It has done more, perhaps, than any other one thing to create in the public mind a feeling that institutions for mental cases are hospitals for treatment rather than asylums for confinement. Such an understanding is of prime importance, since upon it depends the increased confidence of the public in institutions for the mentally ill; a confidence which is necessary if the public is to receive the great benefits which such institutions can give. The need of educating the people has been strikingly demonstrated in the recent unwarranted agitation over the Gordon case. The National and State Societies for Mental Hygiene are spending large amounts of money and putting forth much effort along this line and we should, at least, strive to prevent any retrogressive legislation.

OUR ANNUAL DUES.

The district treasurers have solicited the payment of the annual dues. The great majority of the members of the societies will pay promptly. Some will procrastinate and a few will be indifferent. Soon a report will be sent to the JOURNAL of those who have not paid and therefore cannot receive the JOURNAL. The lessened number of subscribers affects the value of the JOURNAL to advertisers. In order to maintain the value of the JOURNAL's advertising columns the circulation should be kept at the highest possible figure. We are now distributing 4336 copies weekly. If a few hundred members of the Society fail to pay the dues the circulation falls off to that extent.

As compared with other State journals, New York has a circulation of 10,161, Pennsylvania 7432, Ohio 4858. California and Massachusetts are about equal, but it should be remembered that the journals of these other States are published only once a month.

It should also be remembered that the cost of the JOURNAL to the Society is now only about three dollars and ten cents per member. Although the annual dues are somewhat higher than those levied before the World War, it should be remembered that the dues of many State societies are larger than ours. One of the western states requires twenty dollars. Another

argument for prompt payment is the larger reversion to the district societies in proportion to the early returns. The great argument in favor of prompt payments, however, lies in the advantage of giving to the Society the funds for prosecuting its various activities.

THE SOCIAL SERVICE DEPARTMENT OF THE MASSACHUSETTS GENERAL HOSPITAL.

The report of the Social Service Department of the Massachusetts General Hospital for the three years of 1919, 1920 and 1921, is of unusual interest.

Medical Social Service in hospitals may be said to have been broadcasted, like surgical anaesthesia, from this famous institution. The demand for this service became so clear to Dr. Richard Cabot that in 1905 he persuaded the Hospital Trustees to allow him to establish and finance a department called only by courtesy a Department of the hospital. In 1919, convinced of its value as an integral part of the medical treatment, the Trustees voted to accept the responsibility for its conduct and maintenance. Long before this important and significant step was taken, the Department, by courtesy only, had become the parent of many other regularly established departments in other hospitals throughout the country. Its necessity had been clearly demonstrated.

This report of its first three years under hospital management seems to us a most inspiring report. It does not boast, it rather apologizes for the incompleteness of its work, and so evidences its constant striving to discover more helpful methods and thereby proves its virility. No one can read it without feeling the impetus which is behind the movement and understanding in some measure the enthusiasm which grips the workers. It is not the meagre salaries which bind them to it, but the consciousness of real services rendered to people who sorely need them and to physicians whose labor is by them made fruitful.

As Dr. Richard Cabot may be said to be the father of Medical Social Service, so may Miss Ida Cannon be said to be its god-mother. She has been the inspirer of her assistants, the steady leader, and the careful architect of its structure. Her activities have been as broad as the whole national movement, and Boston owes her a deep debt of gratitude for remaining at her influential post instead of accepting far more remunerative offers.

Medical Social Service is now a recognized necessary department in nearly all great hospitals and Boston will have the first right to claim it as a tradition.

WILLIAM CONRAD ROENTGEN.

WILLIAM CONRAD ROENTGEN, discoverer of the roentgen, or x-ray, died in Munich on February 10, aged 77 years. Professor Roentgen was born in Lennep, Prussia, on March 27, 1845, receiving his education first in Holland and later at Zurich, Switzerland. He took his doctor's degree at Zurich in 1869. He served as professor of physics in various German universities, going in 1885 to Wurzburg.

It was in Wurzburg, in 1895, while experimenting with a highly exhausted vacuum tube on the conduction of electricity through gases that he first produced the penetrating rays that made his name famous and brought incalculable benefit to mankind through their use in medicine.

In 1896, jointly with Philip Lenard, who was honored because of his previous researches with cathode rays, he received the Rumford medal of the Royal Society.

DR. BÉLA SCHICK.

CLOSE upon the heels of Coué, the faith healer, came Schick, the scientist. One was acclaimed by the newspapers and stormed by the multitudes, seeking a miracle. The other came and went quietly, honored and respected by the few who understood the truths that he had discovered. The lasting benefits which each has conferred on humanity need not be weighed against each other, for the result would be too obvious.

The modest professor of pediatrics from Vienna will perhaps not be ranked among the world's great scientists, for the principles which he put upon a practical basis were not entirely new, but the fact that he has given to us a new procedure of inestimable value in the saving of human life must cause him to be ranked forever among those who have signally benefited mankind.

News Items.

BEVERLY HOSPITAL STAFF MEETING.—The monthly meeting of the staff of the Beverly Hospital was held at the Hospital Tuesday afternoon, February 6, 1923, at 4 o'clock.

SPRINGFIELD ACADEMY OF MEDICINE.—The regular meeting was held at 137½ State Street, Tuesday, February 13, 1923, at 8.30 p.m. Dr. W. S. Thayer of Baltimore read the paper of the evening, entitled "Portal Obstruction."

BOSTON CITY HOSPITAL.—A staff clinical meeting was held in the Cheever Surgical Amphitheatre Friday, February 16, 1923, at 8 p.m. "The Essential Physiology of the Kidney and

Its Clinical Value," W. Richard Ohler, M.D. Discussed by Channing Frothingham, M.D.

PROFESSOR GEORGE C. WHIPPLE of Harvard University gave on January 6, 13, 20 and 27 at the Wagner Free Institute of Science four lectures on "The Philosophy of Sanitation."—*Science*.

AS DR. CHAUFFARD, professor of clinical medicine at the School of Medicine, who has been the vice-president of the Paris Academy of Medicine, has become president for the year 1923, in accordance with the constitution, the academy has elected Dr. J. A. Doléris vice-president. Dr. Doléris is an honorary obstetrician to the hospitals of Paris. The academy also elected Dr. Souques as annual secretary, and Professors Pouchet and Schwartz as members of the administrative council.—*Science*.

CHANGE OF OFFICE.—Dr. John Rock announces the removal of his office from 374 Marlborough Street to 24 Marlborough Street.

DEATH RATE IN BOSTON.—During the week ending February 10, 1923, the number of deaths reported was 328, against 219 last year, with a rate of 22.20, against 14.95 last year. There were 36 deaths under one year of age, against 29 last year. The number of cases of principal reportable diseases were: Diphtheria, 43; scarlet fever, 91; measles, 121; whooping cough, 78; typhoid fever, 2; tuberculosis, 28. Included in the above were the following cases of non-residents: Diphtheria, 7; scarlet fever, 17; measles, 1; typhoid fever, 1; tuberculosis, 1. Total deaths from these diseases were: Diphtheria, 5; scarlet fever, 1; measles, 3; whooping cough, 6; tuberculosis, 10. Included in the above were the following cases of non-residents: Diphtheria, 1; scarlet fever, 1.

WORCESTER DISTRICT MEDICAL SOCIETY.—The regular meeting of the Society was held on Wednesday, February 14, 4.15 p.m., at the Worcester City Hospital Out-Patient Department, Chandler Street. Program: "Preventive Dentistry," Dr. M. Ginns; "Cisterna-Magna Puncture; Technic and Indications," Dr. B. T. Burley; "Obstetrical Paralysis; Its Early Treatment," presentation of cases, Dr. J. W. O'Meara; "Ununited Fracture of Neck of Femur," Dr. F. W. George; "Ectopic Pregnancy," Dr. A. H. Boyden. There was an exhibit from the Occupational Therapy Department. After the meeting a buffet lunch was served to which the Society and its guests were invited by the Hospital Trustees. Music was furnished by the City Hospital Nurses' Glee Club, led by J. Edward Bouvier, assisted by Miss Agnes Kerley, contralto, and Miss Rachel Clark, violinist.

There was a lecture at Clark College on "The

Nature and Significance of Dynamic Psychology," by Dr. L. Pierce Clark of New York, at 8 p.m., Saturday, February 10, in the assembly room. Members of the Worcester District Medical Society were invited.

BOSTON MEDICAL HISTORY CLUB.—A meeting of the Boston Medical History Club was held at the Boston Medical Library on Monday, February 19, 1923, at 8.15 p.m. The program was as follows: Dr. J. E. Donley, Jr., "The *Scientia Experimentalis* of Roger Bacon"; Dr. W. H. Robey, "Brief Account of the Life of Dr. Messenger Monsey of London, with Portrait," "Dr. Radcliffe's Dispensatory"; Dr. F. B. Lund, "Medical Allusions from the '*Noctes Atticæ*' of Aulus Gellius"; Drs. W. D. Reid and G. C. Shattuck, "The Early History and Use of Antimony."

DR. FRANCIS H. MCCRUDDEN is terminating his duties as chief of medical service at the United States Public Health Service Hospital No. 36, to engage in full-time practice of internal medicine at 512 Commonwealth Avenue, Boston.

THE CONTROL OF BOVINE TUBERCULOSIS IN VERMONT.—The committee having in charge the preparation of the Vermont state budget has agreed to recommend an appropriation of \$100,000 for the eradication of bovine tuberculosis for the first year and \$75,000 for the second year.

RESOLUTION

OF THE STAFF OF THE BOSTON CITY HOSPITAL ON
THE DEATH OF ERNEST BOYEN YOUNG.

"In the death of Ernest Boyen Young, the Staff feel that they have sustained an irreparable loss. He had served the hospital on the Gynecological Staff faithfully for twenty-four years, rising through the various grades to a surgeon-in-chief. The hospital was no perfunctory affair with him. He made it his first interest, and gave to it most freely of his strength. Not only in the performance of the actual work of his department was he of value; he was also an excellent counsellor on matters of hospital policy, and took a great and intelligent interest in the affairs of the hospital as a whole. To the building up of his own department to its present high state of efficiency, he had done more than his share. To his subordinates he was always fair, kindly and considerate. Quiet, reserved, dignified, able, his personality was an ornament to our staff. His rare and kindly smile, when it came, spoke of great and genu-

ine friendliness. His surgery was thorough, efficient and neatly accomplished, and he never as an operator lost sight of the best interests of his patient. He loved to teach, and for years had played a valuable part in the teaching of his specialty in the Harvard Medical School. He gave freely of his services to the poor and unfortunate. During the war he joined the Army Medical Service with the rank of captain. It was natural for him to forget his selfish interests in his desire to serve his country. His family life was of the happiest. He leaves a record of which his wife and son may be proud. We, his colleagues, feel that the hospital is the better for his long connection with it. In our meetings, we shall miss his wise and thoughtful counsel; in the wards and corridors, his friendly greeting."

February 5, 1923.

MEETING TO CONSIDER REORGANIZATION OF FEDERAL HEALTH WORK.

A meeting was called on January 17 by Brigadier General C. E. Sawyer, President Harding's physician, to consider plans for co-ordination of the health activities of the Federal Government. Among those present were the Surgeons General of the Army, Navy, and Public Health Service, the State Health Officers of Arkansas, South Carolina, Kentucky, Michigan, Minnesota, and Virginia, the Chairman of the Executive Committee of the American Institute of Homeopathy, Dean of the Hahnemann Medical College of Philadelphia, President of the Eastern Homeopathic Medical Association, and the Secretary of the Bureau of Legal Medicine and Legislation of the American Medical Association, as well as one or two others. The Conference was called for the purpose of acquainting the medical profession with plans on foot for the development of a Department of Education, Health and Welfare, the Secretary of which is to be a Cabinet Officer. This plan calls for four divisions, namely: Health, Education, Social Service, and Veterans' Service. Inasmuch as the Sixty-seventh Congress will be in session only a little more than a month longer, the chance for consideration of any such plan is practically nil. Even if a bill embodying such recommendations, which are incidentally a part of the general Federal reorganization scheme, were introduced, it would necessitate protracted hearings during which much controversy would probably occur. Congress expects to adjourn on March 3 and has a vast amount of important legislation to get out of the way before that time. It is not likely that any plan for the co-ordination of Federal health work, desirable as such a scheme is said to be, will be considered before the Sixty-eighth Congress meets.

ARGUMENTS IN FEDERAL MATERNITY CASE POSTPONED.

The arguments concerning the motion of the Government to dismiss the suit brought in the United States Supreme Court by the Commonwealth of Massachusetts contesting the Federal Maternity and Infancy Law, which were scheduled to be held on January 22, have been indefinitely postponed. The Solicitor General's Office states that it does not know just when this case will be argued. The Supreme Court has taken a recess until February 19.

LEGISLATIVE MATTERS.

ANTI-VACCINATION IN N. H.—A bill has been introduced in the Legislature of New Hampshire which provides that children of parents opposed to vaccination would be exempt from the requirement that they be vaccinated before attending school.

AID FOR TUBERCULAR PATIENTS IN R. I.—A bill has been introduced in the Legislature of Rhode Island providing for an appropriation of \$12,000 for "tubercular" patients at St. Joseph's Hospital, Warwick, R. I.

MENTAL DISEASES ARE PREVENTABLE

Under this caption, The Monthly Bulletin of the Massachusetts Society for Mental Hygiene for February sets forth the necessity of dealing with the faults of parents, as often found in the corrective measures sometimes applied in dealing with the vagaries of childhood. These subjects are considered in a course of seven lectures on "Mental Health and the Child," to be given in Somerville, commencing March 9. In the mental deviations of childhood there is undoubtedly a larger opportunity to practice preventive measures than at any other period of life; and progress may be expected to follow an educational campaign.

Every large community and perhaps groups of smaller places might arrange to have these lectures given, to great advantage.

Among the speakers are: Dr. Douglas A. Thom, Dr. Abraham Myerson, Dr. Walter E. Fernald, Dr. Augusta Bronner, Dr. Walter L. Treadway, Dr. Miner H. A. Evans and Dr. George K. Pratt.

DINNER TO DR. SCHICK.

On February 8, Dr. Béla Schick of Vienna was guest of honor at a banquet at the Hotel Leroy. This enthusiastic meeting was held un-

der the auspices of the State Board of Health, the City Board of Health, and the Department of Preventive Medicine and Hygiene of Harvard University. Dr. Francis X. Mahoney, City Health Commissioner, presided, and, after presenting Dr. Schick with a gold set of equipment used by the City Schick staff, he turned the meeting over to Dr. Rosenau as toastmaster. It was announced that 30,000 children in the city of Boston had been tested since May 1, 1922.

Mayor Curley commented upon the difficulty of passing public health legislation, but showed, nevertheless, much optimism in regard to both the present condition of Boston health, and to future progress against disease. He stated that Boston should be proud of the achievement of having reduced the tuberculosis mortality 50 per cent. in five years. The future of the city's five health units, made possible by the White Fund, was outlined, and promise of better care for the poor chronic cases in Boston was given. The Mayor is backing the Schick Campaign with all his personal influence and official power.

Commissioner Kelley's slogan is to change "Diphtheria the Uncontrollable" into "Diphtheria the Controlled," and he hopes with the splendid cooperation of Dr. Benjamin White of the State Laboratory and the practitioners throughout the state to put diphtheria into the same category as typhoid fever.

Dr. Schick, himself, spoke very modestly of the work accomplished by him, stating that without the broadminded and the enthusiastic acceptance and support of the immunity test that bears his name nothing would have been accomplished in diphtheria prevention. (His "Cutter Lecture," delivered at the Harvard Medical School, will appear in next week's issue of the JOURNAL.)

Motion pictures of the Boston Schick Staff at work were shown during the course of the dinner.

Such cooperative meetings between city and state officials interested in preventive medicine are gratifying to observe. We urge that more be held, for it is obvious that individual, independent efforts in the same field in one territory are economically and socially wasteful.

A NEW BRITISH PUBLICATION.

We are in receipt of a new British publication, *Nutrition and Pediatrics*, a quarterly gazette on the diet and disorders of infancy and childhood, now in its first volume. In representing the aims of this journal the editors express their belief that there is direct need of a journal dealing with the important question of Dietetics, particularly the early nutrition of childhood, and also with the more simple problems of pediatrics as encountered by the busy practitioner in his daily rounds. It is the intention

of this journal to sift and present to the reader such facts as may be of interest to him in his daily practice.

The edition for the first quarter of 1923 contains articles on "The New Science of Nutrition," "Vaccine Therapy in Childhood," "Simple Ailments of Childhood" and "Milk and Infectious Diseases."

MASSACHUSETTS STATE NURSES' ASSOCIATION.

The mid-winter meeting of the Massachusetts State Nurses' Association was held on Saturday, February 17, 1923, in the Lecture Hall in the Boston Public Library, Copley Square. The program was as follows:

LEAGUE OF NURSING EDUCATION.

Miss Sally Johnson, R. N., President, Presiding.
Business Meeting.

Address: "Bordeaux School." Miss Mary Beard, R. N., General Director, The Community Health Association, Boston.

Address: "The Reorganization of the National League of Nursing Education." Miss Carrie M. Hall, R. N., President of Massachusetts State Nurses' Association, Boston.

Three Minute Talk: "The American Journal of Nursing." Miss Mary M. Roberts, R. N., B. S., Co-Editor, The American Journal of Nursing, New York.

PRIVATE DUTY NURSES' SECTION.

Miss Catherine E. Galvin, R. N., Chairman, Presiding.

Business Meeting.

Three Minute Talk: "The American Journal of Nursing." Miss Roberts.

Paper: "Private Duty Nurses," by Miss Adda Eldredge, R. N., President American Nurses' Association. Read by Mrs. Susie Albert, R. N.

Paper: "The Central Directory," Miss Lucretia J. Gross, R. N., Registrar Suffolk County Central Directory for Nurses, Boston.

AFTERNOON SESSION.

Miss Helen Fowler, R. N., Chairman, Presiding.
Business Meeting.

Three Minute Talk: "The American Journal of Nursing." Miss Roberts.

Address: "Some Conditions Affecting Public Health in Italy, France and England," Miss Beard.

MASSACHUSETTS STATE NURSES' ASSOCIATION PUBLIC HEALTH NURSES' SECTION.

Miss Carrie M. Hall, R. N., President, Presiding.
Music: Nurses' Chorus of Peter Bent Brigham Hospital, Boston. Miss Lavina Murray, R. N., leader.

Reports from County Secretaries (3 minutes).

Report: "Red Cross Nursing in Europe," Miss Sophie C. Nelson, formerly Assistant Di-

rector American Red Cross Nursing Service in Europe.

Report: The Red Cross Nursing Service of New England. Director, Miss Mary K. Nelson, R. N., New England Division, Boston.

Report: Legislative Committee. Mrs. Susan L. Briggs, R. N., for Legislative Committee.

Music: Nurses' Chorus.

Address: Miss Mary M. Roberts, R. N., B. S., Co-Editor "The American Journal of Nursing," New York.

Music: Nurses' Chorus.

Adjournment.

From 5-6 P.M., tea. Guests of The Boston Nurses' Club, 839 Boylston Street, Boston. Served by The Cambridge Hospital Nurses' Alumnae Association.

At 5 P.M., special meeting for all nurses interested in forming a Mental Hygiene Section of The Massachusetts State Nurses' Association.

Miscellany.

UNIFORM REGULATION OF MARRIAGE AND DIVORCE.

On January 23, 1923, identical bills were introduced into both Houses of Congress, providing for the uniform regulation of marriage and divorce. These bills contain several items of interest to sanitarians. For instance, Section 4 states that no license to marry shall be issued to a person who is insane, imbecile, pauper, epileptic, feeble-minded, or afflicted with tuberculosis or venereal disease.

Section 6 requires that the applicant furnish a statement as to his physical and mental condition. Among the requirements of the bill is one stating that application for a license must be made two weeks before it can be issued and that the clerk shall post a notice in his office giving the names and residence of parties applying for a license, so that any person may file a petition against the issuance of the license if he believes that there is any fraud in connection with it. No license shall be issued to a male under 18 years of age, nor to a female under 16 years of age. Divorces may be decreed for adultery, cruel and inhuman treatment, abandonment or failure to provide for a year, incurable insanity, and conviction for an infamous crime.

Because of the necessity of an amendment to the Constitution in order to make constitutional a Federal law regulating marriage and divorce, Representative Fairfield introduced on January 23, 1923, House Joint Resolution 426, which amends the Constitution and gives Congress power to make laws, which shall be uniform throughout the United States, on marriage and divorce, the legitimation of children and the care and custody of children affected by annulment of marriage or by divorce.

CONVALESCENT SERUM IN MEASLES AND CHICKEN-POX.

Blackfan, Peterson and Conroy, in the *Ohio State Medical Journal*, publish results of the use of convalescent serum as a prophylaxis in measles and chicken-pox. For their conclusions they find that the serum of the patients convalescing from measles or chicken-pox confers an efficient temporary immunity when injected into susceptible individuals within five days after exposure. Even if complete immunity is not produced sufficient protection is afforded to limit the disease to a mild form. They feel that these sera will be valuable in preventing severe epidemics in hospitals and institutions, and in protecting those children exposed to measles or chicken-pox in whom the natural immunity has been lowered from other causes.

MONUMENT TO PASTEUR.

A monument to Pasteur is to be erected at Strasbourg, subscribed by men of science and learning throughout the world. The monument, which is the work of the Lyons sculptor, Larivière, will be placed in front of the University, near that of Goethe. It is an obelisk ten feet high, with a medallion of Pasteur and allegorical figures on either side. The International Exhibition of Hygiene, which is being prepared at Strasbourg, will cover more than 12,000 square yards. Different sections will show the influence of Pasteur's work on the life of man and animals, agriculture and industry. A Pasteur Museum will complete the exhibition.—*Science*.

AUSTRALIAN INSTITUTE OF TROPICAL MEDICINE.

The Australian Institute of Tropical Medicine, according to the *Medical Journal of Australia*, is to be reconstructed with the creation of the Commonwealth Department of Health. Part of the continent actually lying within the tropics, and the trade routes bringing it into close contact with other countries heavily infested with malaria, yellow fever, amoebiasis, etc., the need of an adequate research and teaching institution dealing with tropical diseases has been long felt.

The original Australian Institute of Tropical Medicine was officially opened at Townsville in 1913. Its purpose was to provide a post-graduate school for tropical hygiene, but this failed, partly because so few medical graduates wished to avail themselves of its opportunities and partly because the constitution of the institution was not satisfactory. Its control was later taken

over by the Federal Government, an arrangement which proved unsatisfactory, though during this period valuable research was carried on under the direction of Dr. Anton Breiul, the able Director of the Institute. Dr. Breiul resigned in 1921, since when the Institute has been relatively inactive.

With the reorganization Dr. R. W. Cilento, a young graduate of the Adelaide University, has been appointed to take charge, and an energetic and comprehensive program of work has been laid out.

THE SOCIETY OF AMERICAN BACTERIOLOGISTS.

Has elected the following officers for 1923: Professor E. G. Hastings, University of Wisconsin, President; Major A. Parker Hitchens, U. S. Army Medical School, Vice President, and Dr. J. M. Sherman, U. S. Department of Agriculture, Secretary-Treasurer.

At the annual meeting of the American Physiological Society at Toronto, December 27, 28, and 29, 1922, the officers elected were: Professor Anton J. Carlson, University of Chicago, President; Professor Charles W. Greene, University of Missouri, Secretary; Professor Joseph Erlanger, Washington University, St. Louis, Treasurer; Professor Arno B. Luckhardt, University of Chicago, and Professor John R. Marlin, University of Rochester, were elected to the Council.—*Science*.

THE KIDNEY AS A FILTER.

The kidney acts like an ordinary filter in removing waste products from the blood, Professor A. N. Richards and Dr. O. H. Plant, of the University of Pennsylvania, have discovered as a result of experiments which show that in the kidney there is a miniature microscopic filtration plant of extreme complexity.

The blood flows through the finely divided network of blood vessels in the kidneys to many thousands of microscopic filters. Since the blood passes over the heads of these filters under considerable pressure, some water and waste products pass through them, ultimately being excreted, while the bulk of the blood passes back to the main blood stream. Increase in the pressure of the blood on these filters increased the amount of waste products eliminated, just as increase of pressure on a water filter augments the flow of water through it.

In order to carry out such an investigation, it was necessary to develop microscopic instruments and a very fine technic. Although the filtration theory of kidney secretion has been held for years by physiologists, so difficult was the technic to prove it that not until the present time has it been satisfactorily verified.—*Science*.

PROPER VENTILATION.

By actual experiments it has been demonstrated that respiratory sickness is greater among school children in fan-ventilated rooms than in those window ventilated. And this is true even though there is no apparent difference in temperature and the fan rooms contain more area than the window ventilated rooms.—Bulletin Chicago School of Sanitary Instruction.

THE INTERNATIONAL CONFERENCE ON THE STANDARDIZATION OF SERUMS.

Dr. Augustus B. Wadsworth, director of the division of laboratories and research of the New York State Department of Health, has returned to Albany from Paris, where he represented the Rockefeller Institute on the international committee appointed by the League of Nations to standardize serums for the treatment and prevention of pneumonia, meningitis, diphtheria and other diseases. Dr. Wadsworth makes the following statement in regard to the work of this committee:

The Second International Conference on the Standardization of Serums and Serological Tests of the Health Committee was held under the auspices of the League of Nations, November 20 to 26, inclusive, at the Pasteur Institute in Paris. Professor Theodore Madsen, President of the Health Section of the League of Nations, presided at the conference. Opening addresses were made by Dr. Roux, the discoverer of diphtheria toxin, and the French minister. It is noteworthy that the invitations were extended by the Pasteur Institute and that in the interests of science and humanity the representatives of nine different nations found common ground for this first meeting on French soil. We all shared and enjoyed alike the cordial hospitality of the French scientists.

Immediately after convening the members of the conference were assigned to committees to facilitate the business. Professor Jules Bordet, director of the Pasteur Institute in Brussels, was appointed chairman of the sub-committee on serological tests; Professor Louis Martin of the Pasteur Institute, of the sub-committee on the standardization of tetanus and diphtheria antitoxin; Professor Cantacuzene, of Bucharest, of the sub-committee on antidyentery serum; Professor Neufeld, director of the Robert Koch Institute in Berlin, of the sub-committee on anti-pneumococcus serum. I was assigned to three of the sub-committees and served as chairman of the sub-committee on the standardization of antimeningococcus serum.

Progress toward international standardization of serums and serological tests is necessarily a slow one because of the differences in the methods that are used in the several countries, but

for this reason the importance and practical value of the work is all the more apparent. Despite the many different points of view, the practical results from the free discussion were most encouraging. If such conferences can be repeated it is not difficult to understand that the ultimate results in improvement of methods used throughout the civilized world will be of the greatest significance for humanity.—[*Science.*]

EXPERIMENTAL HUMAN INFECTION WITH ASCARIDES.

It has been previously claimed that the larvae of ascarides do not become adults on their primary invasion of the intestinal canal, but pass through the intestinal wall into the lungs, thence to the intestines again via the esophagus, and then reach the adult state.

S. Koino, of the Keio University Medical College, Tokyo, reports in the *Japan Medical World* two experiments in the investigation of this problem. His brother, a healthy man of 21, was first fed with five hundred mature eggs of the pig ascaris, *ascaris surum*. Temperature, cough, and constitutional symptoms supervened. The sputum was profuse, but no larvae were found in it, and no pneumonia was produced. Recovery occurred on the eighth day after the onset of symptoms.

The second experiment was performed by the author on himself, and consisted of the ingestion of two thousand eggs of the human ascaris, *ascaris lumbricoides*. Constitutional symptoms began on the second day and culminated in an ascaris pneumonia. Sputum was profuse and contained ascaris larvae. On the fifth day of the disease 178 larvae were found in the sputum. On the next two days the patient's condition was so serious that no observations were made. Thereafter the course of the disease was mitigated and convalescence began. Fifty days after the test feeding 667 immature worms were recovered after the administration of anthelmintics.

The author concludes that the larvae of both human and pig ascarides migrate in the human body as in the experimental animal, causing pathological changes in the viscera.

The pig ascaris does not become parasitic until adult, and the human body is not a good host. *Ascaris lumbricoides*, on the other hand, becomes parasitic in the larval stage, the severity of the infection dependent on the number of larvae.

VACCINATION AGAINST RABIES.

AN increase in rabies, the *American Journal of Public Health* reports, has been brought about

by the war. To combat this a new method of immunization has been developed in Japan, which has proved most successful. Of 31,307 dogs vaccinated only one failed to show protection against rabinal infection. The method has been tested in this country by Eichorn and Lyon and has been found satisfactory. By this method a single injection only of phenolized fixed virus is injected. Compulsory vaccination, the JOURNAL hopes, may control and even eradicate the disease. This procedure, if attempted, should provide an ideal battleground for the anti-vaccination societies.

GYMNASTICS FOR INFANTS.

The Journal of the American Medical Association, in its letter from Berlin, January 20, 1923, reports experiments in providing systematic exercise for infants, as carried out at the Empress Augusta Victoria House. The exercises are the result of a series of experiments conducted over a period of years by Detlev Neumann, a former army officer and athletic director at the Militärturanstalt.

Exceptionally good results in muscle training have been obtained with both healthy and sick infants, and especially in incipient cases of rickets. A well-padded table is used as a gymnasium floor. After three or four repetitions of the same exercise, the child generally knows what is expected of him. The system is indicated as well for children that learn to walk late and do not make the proper effort, that find it difficult to sit up straight, that have a flabby musculature, and that cannot stand on their feet without assistance.

BEQUESTS.

By the will of the late William G. Vincent, a fund of \$50,000 for establishing a chair of tropical disease at Tulane University of Louisiana School of Medicine, New Orleans, will eventually be available; also, \$30,000 for the erection of an isolation building for the Charity Hospital, New Orleans.—*Science*.

AN ENCOURAGING PHASE OF THE AUTOMOBILE SITUATION.

(Metropolitan Life Insurance Co.)

The growing death toll from automobile accidents undoubtedly constitutes the one bad spot in the public health and accident situation in America today. One has only to read the statements appearing in the daily press to realize this. All available statistical information definitely confirms the steady and practically continuous rise from year to year in the mortality from this cause.

In view of the great and growing seriousness of the automobile situation as a whole, it is particularly gratifying to be able to report on one phase of the hazard which is actually declining. It appears from an analysis of the automobile fatalities among those insured in the Industrial Department of the Metropolitan Life Insurance Company that the rate has actually declined since 1919 among school boys and young men. From 1911 until 1919 there was a steadily increasing rise in every age group. The two years following 1919 have shown this change in the situation—a decline apparently concentrated in the ages between five and 15 and, to a lesser degree, up to age 25. On the other hand, the rate among children under five and at the ages over 25 is increasing. The rate of increase is most marked among those over 65.

Does this mean that the propaganda carried on in the schools and through the public press has actually borne fruit? It is among the boys of school age that a very large proportion of the automobile fatalities occurs. If, as the figures indicate, the influence of the police, safety and school authorities has taught caution in the play habits of these boys, then a real step forward has been taken. On the other hand, the factors, whatever they may be, which have checked the rise in the death rate of boys and young men have failed to be operative in the case of very young children. During the same three years that have witnessed the decline referred to, there was an immense increase (61 per cent.) for children aged one to four. The situation is also discouraging with reference to those over 65. The very young children are too young to be impressed with safety lessons and the very old are not agile enough to avoid the ever-increasing hazard from the multiplication in the number of vehicles.

THE EFFECT OF VACCINIA ON LEPROSY.

THE U. S. P. H. S. Public Health Report for January 5 describes the results of vaccination of a number of lepers in the Kalihi Hospital at Honolulu. Twenty-seven cases, not at the time showing acute leprosy outbreaks, were vaccinated. Of these, sixteen had the nodular type, four the anesthetic type, and seven the mixed. Vaccination was successful in nineteen cases. In the cases unsuccessfully vaccinated no evidence of any change of the leprosy lesions was noted. Of the nineteen successfully vaccinated cases, eleven (six nodular, five mixed) developed acute leprosy eruptions in the two weeks following date of vaccination. Eight (three nodular, four anesthetic, one mixed) showed no evidence of any increased activity of their leprosy.

During the days of arm-to-arm vaccination the possibility of the spread of leprosy by this procedure must be admitted. It is more probable, however, that the vaccination served to bring to light latent or unrecognized leprosy.

PREVENTION OF BLINDNESS.

Excerpt from the address of Dr. Stephen Wise at the annual meeting of the National Committee for the Prevention of Blindness:

"I know that it is said that health is purchasable, but it can't be purchased with and by money alone. Do you know that health is holiness—that health is to be had or to be purchased chiefly through care? And care is what? Well, in one word, it is pre-vision. If we have pre-vision, others need not be denied vision; if we have insight and foresight, many, many of our loved fellow humans need not lose sight. Forevision, or pre-vision, means, really, to use the language that is more current, imagination. The man who imagines is the man who foresees the things that are not immediately visible. So imagination is the thing that is needed—imagination, care, love, the understanding, the inescapable imperative of social obligation.

"As for tuberculosis, we prevent or we may cure. With blindness we must prevent; it is not curable—it is preventable. Many men and women who are blind serve and sacrifice gloriously, but from our point of view we either prevent blindness or we suffer it to come to pass and we make ourselves responsible."

AN UNUSUAL MEDICAL SERVICE.

DR. WILLIAM MOODY PARSONS of East Manchester, N. H., recently celebrated his 97th birthday. He is still in practice and handled an epidemic of smallpox in the early 90's. He has had 3574 babies born under his supervision. He has always enjoyed fishing and hunting, a form of recreation that has been the resource of many active men and which promotes health and mental alertness. He has served on the Board of Health and has taken interest in civic affairs. He advises all who think that they are growing old to keep actively at work. His habits give emphasis to his advice.

The rural medical practice in New Hampshire is largely conducted by men past middle life, which indicates that this state is a good place to live in.

MASSACHUSETTS DEPARTMENT OF
PUBLIC HEALTH.

THE Massachusetts Department of Public Health sends out a series of 33 prenatal and postnatal letters, to cover each month of pregnancy, and two years of infant life. The prenatal letters are printed in Italian as well as English.

This service is not intended in any way to take the place of the doctor, but rather to supplement his advice and to save his time by giving non-technical information of value to the prospective mother. A sample set of the letters will be sent

to any doctor who wishes to see them before sending in a patient's name.

A HEALTH MEASURE.

SPEAKER GILLET has introduced a bill which provides for the appointment of a commission for the purpose of conferring with the proper authorities of all nations to secure their coöperation to make world education and health a feature in world policy.

The plan specifically provides as follows: "The removal of illiteracy from all mankind, instruction in the applications of science and mechanics to the work of the world and the physical welfare of mankind or world health, international or world ethics promotive of just and humane government the world over."

An appropriation of \$10,000,000 is suggested to carry out the terms of this bill.—National Health Council.

SUMMARY OF HEALTH CONDITIONS.

TELEGRAPHIC returns from 67 cities with a total population of 29,000,000 for the week ending Jan. 20 indicate a mortality rate of 14.9, as against 14.1 for the corresponding week of last year. The highest rate (28.4) appears for Nashville, Tenn., and the lowest (8.2) for Tacoma, Wash. The highest infant mortality rate (229) appears for Kansas City, Kan., and the lowest (16) for Paterson, N. J., and Salt Lake City, Utah.

Influenza and pneumonia are responsible for the bad start of 1923. This week ten cities show rates above 20 per 1000 population, whereas for the corresponding week of last year only three cities had such high rates.

Boston, with an estimated population of 770,400, had 304 deaths during the week ending January 20; 39 of these deaths were in children under one year.

FILLED MILK.

THE United States Senate Committee on Agriculture and Forestry have reported favorably on the bill prohibiting "filled" milk.

The report adds:

"In recent years scientists have discovered food elements known as 'vitamines,' which are highly essential to the growth and well-being of the human body. It has been found that such diseases as rickets, scurvy, serious eye diseases, beriberi, and some tuberculosis may be traced to the lack of vitamins in the diet; in fact, the lack of vitamins reduces the whole vitality of the body and invites disease. Our chief source of the vitamins is milk, and the vitamins are found almost wholly in the butter fat of milk. The extraction of the butter fat from the milk seems to leave in the skimmed milk only a trace of so-called vitamin A."

NATIONAL HEALTH COUNCIL.

JAPANESE MEDICAL COMMISSION TO VISIT THE UNITED STATES.

A RECENT cable dispatch from Tokyo announces the appointment of Baron Yoshihiro Takagi, chief surgeon and professor of surgery in the Tokyo Charity Hospital and Medical College, as a member of a commission of six Japanese doctors who will arrive in the United States early in March as guests of the Rockefeller Foundation for the purpose of studying American and Canadian medical institutions and methods.

The Commission was appointed by the Japanese Minister of Education, Doctor Eikichi Kamada, to whom the Foundation's invitation was extended by President Vincent through Baron Shidehara, the Japanese ambassador at Washington. Nominations for membership in the Commission were made by the Japanese Committee for Graduate Medical Education in the United States, headed by Baron Sakatani, under whose auspices a number of Japanese physicians have pursued post-graduate studies in the United States.

The Commission as a whole, or individual members, will visit the leading hospital and research centers in the United States and Canada, including New York, Philadelphia, Baltimore, Boston, St. Louis, Cleveland, Chicago, Rochester, Minn., Montreal, and Toronto.

RÉSUMÉ OF COMMUNICABLE DISEASES.

DECEMBER, 1922.

GENERAL PREVALENCE.

The more prevalent diseases showing an increase over the previous month are as follows: Chicken-pox, influenza, measles, mumps, pneumonia (lobar), scarlet fever, whooping-cough.

RARE DISEASES.

Actinomycosis was reported from Pepperell, 1.

Anterior Poliomyelitis was reported from Andover, 1; Boston, 2; Fall River, 1; Haverhill, 1; total, 5.

Dog-Bite Requiring Anti-Rabic Treatment was reported from Beverly, 1; Cambridge, 1; Chelmsford, 1; Dartmouth, 1; Lowell, 2; Warren, 2; total, 8.

Encephalitis Lethargica was reported from Boston, 1; Framingham, 1; Springfield, 1; Worcester, 1; total, 4.

Epidemic Cerebrospinal Meningitis was reported from Everett, 1; Fall River, 1; Lynn, 1; Northbridge, 1; Somerville, 1; total, 5.

Hookworm was reported from Boston, 1.

Malaria was reported from Malden, 1.

Septic Sore Throat was reported from Barnstable, 3; Boston, 14; Brockton, 1; Cambridge, 1; Eastham, 1; Fall River, 1; Fitchburg, 1; Norwood, 1; Somerville, 1; total, 24.

Tetanus was reported from Attleboro, 1; Brockton, 1; total, 2.

Trachoma was reported from Boston, 4; Easton, 1; Lowell, 2; Peabody, 1; total, 8.

Trichinosis was reported from Boston, 3; Northampton, 1; total, 4.

Correspondence.

LONDON LETTER.

(From Our Own Correspondent.)

London, January 26, 1923.

Mr. Editor:

The Discovery of Bacteria.—It is curious and certainly somewhat of a coincidence that at the time of the celebration of the anniversary of Pasteur, the discoverer of microorganisms and their relation to health, it is said to have been found out that the discovery was antedated by more than one hundred years. In some old books an antiquarian of Paris came across the second volume of the fourth edition of the French translation of a medical treatise originally written in Latin by the famous Astruc, consulting physician to Louis XV. and found evidence that as far back as 1726 a Frenchman named Boile, designated a charlatan by Astruc, was familiar with microbes and bacilli. Moreover, he performed blood tests by means of microscopical analysis and claimed to be conversant with the intricacies of something closely resembling phagocytosis. Accused of charlatanism, Boile fled from Paris. In those days, by the way, barely two hundred years ago, the trial for such offense consisted of the ordinary and "extraordinary" question, the latter amounting to torture. Astruc among his many titles possessed that of Professor of Medicine at the Collège Royal de France. Dealing with the opinion of those who alleged that certain kinds of disease are "nothing else but a swarm of numerous very small animals, very nimble, very active, very prolific, which once they are introduced in the human body, pricking, piercing, biting the parts they fasten to and thereby inflaming and eating away by degrees and ulcerating them," as may be imagined when the position of medicine at that time is considered,—it may be almost termed the iron age of medicine,—Astruc dismissed summarily these claims as mere fictions devoid of any kind of proof. However, Astruc does add in another part of his book, the fourth edition of which was published in 1764, that he remembers in this connection that a charlatan by name Boile impudently spread about in Paris in 1726 similar follies, and begging to be excused from recounting them he says: "That man Boile asserted that all diseases were caused by small animals enclosed in the blood, that each disease is due to different animals, that these mischievous animals have each of them in particular other animals for their enemy, which pursue them and destroy them, like hunting dogs destroy hares or hawks destroy pigeons. That he knew perfectly well various kinds of animals which produce each kind of disease, and those which are most contrary to them and which may be of use to heal the disease, that he knew remedies which contained those helpful animals in the greatest abundance, and that he, therefore, possessed the art of healing in a radical manner all diseases by a very safe, very brief, and very efficient method." It seems as if Boile had more than a glimmering of bacteriology and it is certain that he met with the fate of most men who live before their time, or rather before the times are adapted for

the reception of revolutionary medical scientific views. A few centuries before the propounding of so iconoclastic opinions would have been visited by the direst punishment, being burned as a wizard or something of the sort. Also the discovery detracts in no wise from the fame of Pasteur. There are not many great discoveries which have not been hinted at previously, and Pasteur had no idea that Boile had propounded views of bacteriology which contained the germ of that science.

Centenary of the *Lancet*.—The *Lancet*, which celebrates its centenary in October of this year, is the oldest medical journal of the world; at any rate of the English-speaking world, although it is run fairly close by the BOSTON MEDICAL AND SURGICAL JOURNAL. The main interest in the fact that the *Lancet* has weathered the storms of medical journalism for 100 years, and is now sailing with a fair wind, is not only that it has chronicled the principal happenings of the medical world in all parts of the civilized globe and has been an able exponent of the progress of medicine and surgery, but it has represented the advance of medical journalism and has taken part in and even been the means of introducing certain needful reforms into the practice and conduct of medicine and surgery and of those who follow the same. The journal was founded, as its name seems to imply, with the "object of cutting out many ills and excrescences which marred the practice of medicine in 1823." Its founder, Thomas Wakley, was a born fighter, and it may be said of his stormy journalistic career that he was successful in many of his aims. The *Lancet*, in effect, perhaps, on the whole, best exhibits in its pages the advance of medical journalism during the past one hundred years. It has been and is more staid—conservative is the more fitting word—than some American medical journals. This attitude, however, is in keeping with the British character. Still it has moved and is moving with the times, and its statements are, generally speaking, authoritative and convincing. It is a journal, too, of high literary merit and throughout its medical journalistic long life has been peculiarly happy in its editors.

The Effect of Fog on Health.—Medical men the world over are becoming more and more convinced of the baneful influence exerted by the lack of light, and especially of sunshine on the human population and, of course, the reverse is true. In particular, this statement applies with the greatest force to children. Rickets, for instance, is said by some, to wit, Professor Noel Paton and Dr. Findley of Glasgow, to be almost wholly due to environment and insufficiency of light and sunshine, and they state their opinions that in the production of rickets unsuitable diet plays a practically negligible part. Other authorities whose words are as worthy of attention as the Glasgow medical scientists, and among these is Dr. Robert Hutchison of London, hold firm to the long held view that diet is by far the main factor in the production of rickets. Still others, including Dr. Eric Pritchard of London, whose views on the subject, expressed in his recent book, "Physiological Feeding of Infants and Children" (Kempson & Sons, London), are deserving of notice, take the standard that several causes are responsible for rickets; that diet and lack of light are prominent factors, but that the main cause is ill-balanced metabolism, brought about principally by diet unsuitable in quantity, or quality or by both, but also by unhealthy environment, inadequate light and sunshine and so on. That want of sunshine has a sinister effect on health is proved frequently in the large manufacturing towns of this country. London is the most outstanding example. London fogs have been this year conspicuous by their absence and the consequence has been that the health of its inhabitants has been exceptionally good. But as a practical exhibition of what fog can do, one which occurred a

few days ago will afford an excellent illustration. There had not been a fog in London for the space of ten weeks, and when fog is absent London is more healthy than the other great towns of Great Britain. The fog referred to above sent up the death rate quickly. Manchester at the present time vies successfully with London for first place as regards fogs, and most of the big industrial centers have an evil reputation in this respect. There is no doubt that the presence of fog is inimical to health and that, were effective smoke abatement measures in force in large British cities, that respiratory diseases would be far less common and fatal, especially bronchitis, and that a check would be given to rickets, tuberculosis and certain other diseases. Indeed, smoke abatement would be a preventive medicine measure of the first rank, and one which would be by no means difficult to bring about.

Registration of Disease.—At a meeting of the British Royal Statistical Society of Arts held in London a few days ago, Dr. K. Duddfield advocated the establishment of a national system for the registration of disease. Dr. Duddfield said, in part, that though much attention had been given to epidemic diseases, there was a mass of sickness and disablement treated in hospitals and other institutions maintained by voluntary contributions, the municipalities and the Poor Law, of which no study on a grand scale had been attempted. The research work which was going on was too piecemeal in character. Data should be brought about from all institutions to be collated and analyzed by a central body of statisticians with medical experience. Hospitals and similar institutions had received recently help from local rates and imperial taxes. Had not the time come when the payers of rates and taxes might demand from them periodical returns of the diseases and accidents treated and the results of such treatment?

Tracing Botulism.—A report on the Loch Maree botulism case, in which eight persons lost their lives last August from eating wild duck paste, has just been issued by the Scottish Board of Health. It is the work of Dr. Gerald Leighton, Medical Officer (Foods) Scottish Board of Health. The wild duck paste contained *Bacillus botulinus*. Mr. Bruce White, the bacteriologist who carried out the investigation, injected four mice with the wild duck paste, but gave two of these a quantity of botulinus antitoxin. The next morning the mice which had not been given the antitoxin were dead; the two "protected" mice remained well. The experiment was repeated on rabbits with the same result. The antitoxin is, therefore, a protection. Dr. Leighton in the course of his report said: "As the result of the great publicity given by the press to the Loch Maree tragedy, and because the symptoms in all these cases were very accurately described in the newspapers, every doctor in the land, and many other people besides, will have indelibly imprinted on their minds the symptoms of botulism. It has in the past been mistaken in a few instances for encephalitis lethargica, or alcoholism, or meningitis, or bulbar paralysis, or cerebrospinal meningitis. It is not nearly so likely that it will be so mistaken in the future. Personally I am quite prepared to find an apparent increase in the number of cases of botulism. All that can be demanded of those who are engaged in the business of manufacturing preserved foods is that they take every reasonable precaution to supply the public with pure food properly preserved. My own opinion is that the reputable firms do this, as indeed they must for their own commercial success. I do not think it is too much to ask of manufacturers that their final sterilizing process should be of such a character that the temperature used may be expected to destroy the spores of the pathogenic organisms." Dr. Leighton would like to see glass containers abolished. In his opinion given good tins, the tin container has every advantage over the glass one as a

vehicle for preserving foods. Glass containers cannot be heated above boiling point without the risk of a good many being broken, whereas efficient sterilization of the food contents can be carried on in the tin containers, thus securing the destruction of any pathogenic spores.

New L. C. C. Mental Hospital.—The Maudsley Hospital of the London County Council is about to be opened. The hospital is the first institution to be established in this country by a local authority for the early treatment of cases of acute mental disease, the promotion of scientific research into the causes and pathology of insanity, and the provision of clinical instruction in psychological medicine.

Sleeping Sickness.—Last week at the Royal Society of Tropical Medicine and Hygiene in London two papers of importance were submitted on the treatment of African sleeping sickness. One of these dealt with the German synthetic product known as "Baxerzoz," which has now been tried in nine cases of sleeping sickness occurring in Europeans. It seems to be very potent in the treatment of patients infected with the organism known as *T. Gambiense*. The second paper read dealt with a preparation named Tryparsamide, made in the Rockefeller Institute. This drug seems to have given admirable results, although it has been less widely tested than the German preparation. In connection with sleeping sickness it may also be mentioned that a grass has been discovered which is so obnoxious, and indeed inimical to the tsetse fly, the carrier of the germ of sleeping sickness, that the fly cannot exist in its vicinity. This grass is much liked by horses and cattle and is exceedingly nutritious. On the principle that prevention is better than cure, the planting of this grass in regions infested by the tsetse flies would be a better mode by far of coping with this devastating disease than the most effective curative treatment.

Obituary.—Hunter Finlay Tod, M.D., F.R.C.S., of Upper Wimpole Street, died at the London Hospital, Mile End Road, London, on January 19 last. Dr. Tod was one of the best known British aurists and throat specialists. He was educated at Cambridge University, London Hospital, Leipzig, Halle, Vienna and Berlin. Formerly surgeon to the throat and ear departments of the Paddington Green Children's Hospital, he was afterwards appointed senior surgeon of the ear, nose and throat department of the London Hospital and lecturer in aural surgery at the Medical College of that hospital. He wrote on diseases of the ear for the "Oxford Medical Manuals," on operations on the ear in Burghard's "System of Operative Surgery," and on diseases of the external auditory canal and tympanic membrane in Allbutt and Rolleston's "System of Medicine."

The death has just taken place of a famous Oxford surgeon, Mr. Horatio Percy Symonds, who in his day was one of the most striking personalities of Oxford.

LA THÉRAPEUTIQUE DES PÉCHÉS CAPITAUX.

Geneva, January 10, 1923.

My Editor:

"La Thérapeutique des Péchés Capitaux" by Dr. Laumonier.—The Treatment of the Capital Sins—is unquestionably a title of a book that may well be expected to draw the attention of the medical profession. However, no moral comfort will be obtained by reading the volume, although one learns that most mental men throw aside psychotherapy—or at least regard it as insufficient—and recommend to begin the cure of the capital sins by a somatic or medical treatment. Sometime ago Durand Pallot, in a volume entitled "La Cure d'Âme Moderne"—The Cure of the Modern Soul—pointed out the close relationship ex-

isting between certain vices and certain organic changes.

Dr. Laumonier's distinction between *capital* sins and *venial* sins may seem rather arbitrary to those whose moral conscience is exclusively formed from the Bible. The biblical notion of sin—no matter what individual or social consequences it may have—will invariably be characterized by a subjective consciousness of violation of the divine law at all time giving rise to the experience of personal guilt. The assertions of the Scriptures reveal to the Christian conscience the superficial and frequently demoralizing classifications of the various sins according to the traditions of the Church.

During the early centuries and middle ages the Church, by the agency of its doctors and monks, allowed itself to become influenced—as it did in other respects—by the popular feeling which judged sins only according to their social or ecclesiastical consequences, and undoubtedly this point of view is of the highest importance and certainly merits the moralist's attention. It results in attempts at classification which indisposes Christian feeling but at the same time offers certain advantages.

Nevertheless, the fact remains that ecclesiastical distinction between capital and venial sins is derived from a purely social idea of error. Therefore, Dr. Laumonier, who adopts this viewpoint, does not include hypocrisy or lying as he says that both "comprise the elements of daily human intercourse" and that only those capital sins should be considered medically whose consequences are patently baneful to society.

At the end of the second century of our era the capital sins numbered only three, namely, idolatry, adultery and homicide. The Church punished these three sins by public penitence, so that errors escaping punishment were naturally regarded by public opinion as far less serious.

It was only at the commencement of the fifth century that John Cassien, the organizer of monachism in western Europe, formulated general rules for monks, among which a new list of sins, among them being gluttony, likewise designated by the Latin expression, *concupiscentia gulæ*. St. Gregory the Great also classified sin, and finally St. Thomas, with that precision for which he is famous, fixed the number and essence *ne varietur*. They were gluttony, laziness, lust, jealousy, anger, pride and avarice.

In Dr. Laumonier's extremely interesting book one notes all the reserve made in respect of the notion of sin. The principles and method of psychoanalysis are completely ignored. He explains his disillusion resulting from psychological and moral treatment, even of the most up-to-date kind, recommended by Freud, Baudouin and Coué, and in this respect he quotes one of the most free-minded and distinguished men of contemporary French science, Prof. Pierre Janet, who in his book entitled "Les Médications Psychologiques," Paris, 1919, believes that these "medications," or treatments, only result in most uncertain cures. Not that Dr. Laumonier discards *a priori* resort to psychologic methods, but he maintains that one should commence by medical treatment, he having learned from his personal experience that the cure of human passions is thus more surely attained. He refers to the case of a little girl of eleven years cured of her jealousy—undiscovered by the attending physician—by a simple treatment of the hepatic disorders she presented. Also, the cases of several indolent children whose laziness was cured by detecting and treating acoustic or respiratory disturbances or insufficiency.

Dr. Laumonier freely admits the somatic treatment of human vices and passions is yet in its infancy, that the relationship between emotions and glandular activity appears probable although still insufficiently proved. On the other hand, however, he is inclined

to suspect that all disorders of the soul are more or less dependent upon physical disorders, and even the specific products of certain endocrine glands, the suprarenal, for example, may provoke an emotional state which leads to the development of one of the capital sins.

We cannot give too much praise to Dr. Laumonier's desire to obtain a social and moral recovery of afflicted human beings and which has resulted in his writing upon the nature and social effects of capital sins in a most enlightened and scientific manner. His analyses of indolence, lust, pride and avarice, simply stated, will remain models of objective observation.

Yours very truly,

CHARLES GREENE CUMSTON,
Lecturer on the History of Medicine and Medical
Philosophy at the University of Geneva.

CASES REPORTED TO MASS. DEPT. OF PUBLIC HEALTH.

WEEK ENDING FEBRUARY 3, 1923.

<i>Disease</i>	<i>No. Disease</i>	<i>No.</i>	
Anterior poliomyelitis	1	Mumps	212
Chicken-pox	181	Ophthalmia neonato-	
Diphtheria	221	rum	27
Dog-bite requiring anti-		Pneumonia, lobar	216
rabie treatment	9	Scarlet fever	267
Encephalitis lethargica	2	Syphilis	40
Epidemic cerebrospinal		Tuberculosis, pulmon-	
meningitis	3	ary	156
German measles	9	Tuberculosis, other	
Gonorrhea	97	forms	14
Influenza	201	Typhoid	11
Measles	889	Whooping cough	370

MEETING OF THE SUFFOLK DISTRICT MED- ICAL SOCIETY FEBRUARY 28.

The medical and surgical aspects of colitis are to be discussed at a meeting at the Boston Medical Library on February 28. Study of this disease has been too much neglected. The seriousness of the condition is often not recognized at the beginning. When acute the diagnosis may not be made promptly or adequate treatment started. In chronic cases the great danger to life is often overlooked.

The results to be expected from medical treatment are not generally understood. The benefits to be expected from surgery are unsettled because not widely adopted. The advantages to be derived from appendicostomy, which gives an opportunity for local irrigations, are hardly comparable with those of caecostomy, which rests the diseased bowel as well as giving far better chance for local treatment. Surgery has well defined fields of usefulness in the treatment of such conditions as diverticulitis and the various types of obstruction. But the limitations of medical treatment and the indications for surgical treatment in colitis are but poorly understood. The meeting to be held next Wednesday evening promises to be of unusual interest both to physicians and surgeons. All are cordially invited to attend, and to hear the subject of colitis discussed by such authorities as Drs. Henry F. Hewes and Daniel Fiske Jones.

THE NORFOLK DISTRICT MEDICAL SOCIETY.—A regular meeting of the Society will be held at Roxbury Masonic Temple, 171 Warren Street, February 27, at

8.15 p.m. Business. Communication. "The Surgical Treatment of Thyroid Disease," illustrated, Frank H. Lahey, M. D. Refreshments after the meeting.

BRADFORD KENT, M.D., Secretary.

RECENT DEATH

DR. JAMES WILLIAM HINCKLEY, of Brookline, died at his home February 7, 1923, aged 65. He was a graduate of Tufts College Medical School in 1898, practiced gynecology and was a member of the American Medical Association and of the Massachusetts Medical Society.

SOCIETY MEETINGS.

The annual meeting of the Massachusetts Medical Society will be held in Pittsfield, June 12 and 13.

DISTRICT SOCIETIES.

A list of society meetings is herewith published. This list will be changed on information furnished by the secretaries of the societies, and will appear in each issue.

Barnstable District:—Hyannis, May 4, 1923.

Bristol South District:—Fall River, May 3, 1923.

Essex North District:—Lawrence, Y. M. C. A. Building (Annual Meeting), May 2, 1923.

Meetings of the Suffolk District and the Boston Medical Library, at the Library:

March 28, 1923:—Surgical Meeting. "A Review of What Surgery Can Accomplish in Diseases of the Thoracic Organs, with a Forecast of the Future," Dr. Howard Lillenthal of New York.
April 25, 1923:—Annual Meeting. Election of Officers. "The Record of the Past Twelve Years in Syphilology, with a Forecast of the Future." A series of 10-minute papers. Dr. C. Morton Smith, Boston, will preside.

The Springfield Academy of Medicine meets the second Tuesday of each month. Schedule of speakers includes the following names: Dr. Alexis Carrel, Dr. W. B. Long, Dr. J. W. Williams, Dr. W. S. Thayer, and Dr. Barton Cooke, Illist. The date for each speaker has not been assigned.

Middlesex East District:

March 21, 1923:—Mental Factors in Childhood. Paper by Dr. William Healy.

April 18, 1923:—Interpretation of Laboratory Findings. Papers by Dr. E. G. Crabtree and one to be announced later.

May 9, 1923:—Annual Meeting.

All meetings except the Annual Meeting will be held at the Harvard Club in Boston. A. E. Small, Secretary.

Worcester District meetings are scheduled as follows:

March 14, 1923:—The meeting will be held at St. Vincent's Hospital at 8.15 P. M. The program will consist of a series of papers by members of the staff.

April 11, 1923:—The meeting will be held at Memorial Hospital at 8.15 P. M., and the program will consist of a series of papers by members of the staff.

May 9, 1923:—Annual Meeting and banquet.

STATE, INTERSTATE AND NATIONAL SOCIETIES.

NEW ENGLAND PEDIATRIC SOCIETY:—The following are the dates for meetings the coming season. Each meeting is on the second Friday of the month at the Boston Medical Library: March 9, April 13 and May 11.

March, 1923:—Massachusetts Society of Examining Physicians (date and place undecided); Hilbert F. Day, Secretary.

March, 1923:—Boston Association of Cardiac Clinics. Meeting March 15, 1923, at 8.15 P. M., Boston City Hospital. Subject: Prevention and Relief of Heart Failure.

March, 1923:—Boston Medical History Club will meet the third Monday of this month.

April, 1923:—New England Dermatological Society meeting, April 11, 1923, at 3 P. M., in the Surgical Amphitheatre, Boston City Hospital; C. Guy Lane, Secretary. Massachusetts Association of Boards of Health, April 26, 1923, Boston; W. H. Allen, Mansfield, Mass., Secretary.

April, 1923:—Boston Medical History Club will meet the third Monday of this month.

May, 1923:—Massachusetts Society of Examining Physicians (date and place undecided). American Pediatric Society meeting, May 31, June 1 and 2, 1923, at French Lick Springs Hotel, French Lick, Ind.; H. C. Carpenter, Secretary.

May, 1923:—Boston Association of Cardiac Clinics. Meeting May 17, 1923, at 8.15 P. M., Children's Hospital. Subject: Rheumatism and Chorea and Heart Disease.

June, 1923:—American Medical Association, San Francisco, June 25-29, 1923; Olin West, Chicago, Ill., Secretary.

July, 1923:—Massachusetts Association of Boards of Health, July 26, Nantasket; W. H. Allen, Mansfield, Mass., Secretary.